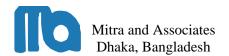
# 2001 URBAN FAMILY HEALTH PARTNERSHIP EVALUATION SURVEY

# **Household Survey Report**

February 2003





# Contributors to the Report

Gustavo Angeles, University of North Carolina at Chapel Hill Paul Hutchinson, Tulane University S.N. Mitra, Mitra and Associates



The technical report series is made possible by support from USAID under the terms of Cooperative Agreement HRN-A-00-97-00018-00. The opinions expressed are those of the authors, and do not necessarily reflect the views of USAID.

#### **ACKNOWLEDGEMENTS**

We would like to acknowledge the contribution and support of the large number of people and organizations that assisted in the successful completion of the 2001 Urban Family Health Partnership Evaluation Survey. First, we wish to thank the women and household members who took time out from their busy daily lives to answer the plethora of detailed questions posed to them. Many of these questions involved issues of a very sensitive nature, and their patience and willingness to respond was greatly appreciated. We would also like to thank the numerous community leaders and health personnel, who also took time out from their work to provide us with the background information on communities and health facilities that framed the subsequent analyses.

The USAID mission in Dhaka provided financial support for the 2001 Urban Family Health Partnership Evaluation Survey. In particular we would like to express our gratitude to Kanta Jamil, who provided technical assistance and advice throughout the design of the survey and the field work stages. Kanta also provided and careful and critical review to the report. We would also like to thank Jay Anderson, Charles Llewellyn, Neil Woodruff and Moslehuddin Ahmed for their comments and support.

In addition, we would like to thank our colleagues at Mitra and Associates for all of their tireless work in collecting the data. The technical requirements for the survey were many, and they handled all problems and eventualities with great aplomb and skill. We would particularly like to thank S.N. Mitra and Shahidul Islam for their efforts, their professionalism and hospitality.

Thanks go out as well to the personnel at John Snow International for their assistance in providing information on the Urban Family Health Partnership and for escorting us on field visits. In particular, we would like to thank S.M. Tariq Azim, Amy Cullum, and Arzumand Akhter.

Technical assistance was also provided by personnel at ORC Macro, Inc. Tulshi Saha proved invaluable with his input on the questionnaires and the training program. Alfredo Aliaga provided considerable assistance in designing the sampling frame for the survey. We would also like to thank Han Raggers for providing both valuable and thorough technical assistance in all aspects of data processing and calculation of the indicators presented within this report.

# TABLE OF CONTENTS

ACKNOWLEDGEMENTS	i
LIST OF TABLES	v
LIST OF FIGURES	vii
SUMMARY	ix
CHAPTER 1. INTRODUCTION	1
1.1 Background on the Urban Service Delivery Partnership	1
1.2 Objectives of the Survey	1
1.3 Organization of the Survey	3
Sample Design	3
1.4 Training and Fieldwork	5
1.5 Selection of Facilities	
CHAPTER 2. HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS	9
2.1 Age and sex composition	
2.2 Household Composition	12
2.3 Housing Characteristics	
2.4 Housing Characteristics and Possession of Durable Goods	13
2.5 Socioeconomic Status	17
Basic Characteristics	
CHAPTER 3. WOMEN'S CHARACTERISTICS AND STATUS	
3.1 General Characteristics	
3.2 Differentials in Education	
3.3 Exposure to Mass Media	
3.4 Membership in NGOs	
3.5 Proximity to Health Care Facilities	
CHAPTER 4. FERTILITY	
4.1 Current Fertility	
4.2 Fertility Trends	
4.3 Birth Intervals	
CHAPTER 5. FAMILY PLANNING	
5.1 Knowledge of Family Planning Methods	
5.2 Current Use of Contraception	
Differentials in Current Use	
Trends in Contraceptive Use	
5.3 Current Use of Contraception by Married Adolescents	
5.4 Sources of Family Planning Services	
Differentials by Type of Areas	
Project versus Non-project Areas	
5.5 Knowledge of Sources among Non-users	
5.6 Contraceptive Discontinuation Rates	
5.7 Reasons for Discontinuing Contraceptive Method	
CHAPTER 6. INFANT AND CHILD MORTALITY	
6.1 Assessment of Data Quality	
6.2 Early Childhood Mortality Rates	
6.3 Early Childhood Mortality by Regions and Socioeconomic Characteristics	
6.4 Demographic Characteristics and Mortality	
CHAPTER 7. REPRODUCTIVE AND CHILD HEALTH	
7.1 Antenatal Care (ANC)	
Number and Timing of ANC visits	
7.2 Iron Supplementation	80
7.3 Tetanus Toxoid (TT) Vaccination	
7.4 Knowieuge of Fleghancy Combilcations and Care	გე

7.5 Delivery Care	90
Place of Delivery	90
Assistance during Delivery	90
7.6 Childhood Vaccination	94
Vaccination Coverage	94
Source of Vaccination	
Trends in Childhood Vaccination	103
Knowledge of Vaccination Schedule	106
7.7 Prevalence and Treatment of Acute Respiratory Infections	108
Knowledge of proper ARI treatment	114
7.8 Vitamin A Supplementation	116
Knowledge of Importance of Vitamin A	117
7.9 Childhood Diarrhea	119
Prevalence of Diarrhea	119
Treatment of Diarrhea	121
Sources of Diarrhea Treatment	125
Feeding Practices during Diarrhea	
Knowledge of Proper Treatment of Diarrhea	
CHAPTER 8. INFANT FEEDING	129
8.1 Initiation of Breastfeeding	
8.2 Exclusive Breatfeeding and Timing of the Introduction of Supplementary Foods	
8.3 Duration of Breastfeeding	134
CHAPTER 9. AWARENESS AND USE OF NIPHP CLINICS	
9.1 Awareness of Temporary/Satellite Clinics	
9.2 Knowledge of ESP Services at Satellite Clinics	140
9.3 Use of Temporary/Satellite Clinics	
9.4 Essential Service Package (ESP) Services Ever Used at Temporary/Satellite Clinics	
9.5 Use of ESP Services at Satellite Clinics in Most Recent Visit in past 3 months	
9.6 Assessment of Quality of Care at Temporary/Satellite Clinics	
9.7 Awareness of Sources of Health and Family Planning Services	
9.8 Type of Clinics Identified as Providing Health or Family Planning Services	
9.9 Knowledge of ESP Services at Hospitals/Clinics	154
9.10 Identification of ESP services at Static Clinics	
9.11 Use of Static Clinics/Hospitals	
9.12 Use of ESP Services at Hospital/Clinics	
9.13 Assessments of Quality of Care at Hospitals/Clinics	161
APPENDIX A: TABLES	A-1
APPENDIX B: MITRA AND ASSOCIATES PERSONNEL WHO IMPLEMENTED THE 2001 UFHP	
SURVEY	B-1
APPENDIX C: OUESTIONNAIRES	C-1

# LIST OF TABLES

Table 1. Percent of children 12-23 months old vaccinated any time before the survey	
Table 2. Percent of Immunized Children Receiving Vaccinations from UFHP Facilities	xiv
Summary Table of NIPHP Results Framework Indicators, 1998 Baseline Survey and 2001 UFHP	Evaluation
Survey	
Table 1.1 NIPHP Results Framework Monitoring Indicators	2
Table 1.2 Population size and number of clusters	
Table 1.3 Population size and number of clusters by sub-strata	
Table 1.4 Household Samples	5
Table 1.5 Results of the household and individual interviews	
Table 1.6 Selection of Facilities for Interview	
Table 2.1A Household population by age, sex and residence	
Table 2.1B Population pyramid	
Table 2.2 Household composition	
Table 2.3 Housing characteristics	
Table 2.4 Housing characteristics	
Table 2.5 Socioeconomic Status	
Table 3.1 Background characteristics of respondents	22
Table 3.2 Educational attainment by background characteristics	
Table 3.3 Access to mass media	
Table 3.4 Exposure to mass media	
Table 3.5 Membership in NGOs	
Table 3.6 Distances to Facilities	
Table 4.1 Current fertility	
Table 4.2 Fertility by background characteristics	
Table 4.3 Trends in Total Fertility Rates	
Table 4.4 Trends in age-specific fertility rates	
Table 5.1A Knowledge of contraceptive methods – currently married women	
Table 5.1B Knowledge of contraceptive methods – ever married women	
Table 5.2A Knowledge of any 3 contraceptive methods by background characteristics	
Table 5.2B Appropriate Methods for Limiting or Spacing Births	
Table 5.2B Appropriate Methods for Elimiting of Spacing Britis	
Table 5.3B Current use of contraception by married adolescents	
Table 5.4A Source of contraception – City Corporations	
Table 5.4B Source of contraception – District Municipalities	
Table 5.4C Source of contraception- Thana Municipalities	
Table 5.4D Source of contraception- Total UFHP	
Table 5.4E Source of contraception- non-UFHP	
Table 5.5 Source of Modern Contraception by Asset Quintile	
Table 5.6 Knowledge of source for non-Users	
Table 5.7 First-year contraceptive discontinuation rates	
Table 5.8 First-year Discontinuation Rates for City types and Project/Non-Project Areas	63
Table 5.9 Reasons for discontinuation	
Table 6.1 Early childhood mortality rates	
Table 6.2 Early childhood mortality rates by socioeconomic characteristic	
Table 6.3 Early childhood mortality rates by demographic characteristics	
Table 7.1A Number of antenatal care visits and timing of first visit	
Table 7.1B Source of Antenatal Care	77
Table 7.2 Source of Antenatal Care by Asset Quintile	
Table 7.3 Iron Supplementation (last one year)	
Table 7.4A Tetanus Toxoid Injections (last one year)	

Table 7.4B Source of Tetanus Toxoid Injection (last one year)	
Table 7.5A Knowledge of Complications for Pregnancy	86
Table 7.5B Response to Complications of Pregnancy	
Table 7.5C Knowledge of Potential source of medical services for complications of pregnancy	89
Table 7.6 Place of delivery	92
Table 7.7 Assistance during delivery	
Table 7.8 Vaccinations by source of information	95
Table 7.9A Vaccinations by background characteristics – Crude (Card and Mother's Report)	97
Table 7.9B Vaccinations by background characteristics – Valid (Card Only)	98
Table 7.10A Source of vaccinations	
Table 7.10B Vaccinations in the first year of life	103
Table 7.11 Source of Vaccination by Asset Quintile	
Table 7.12 Knowledge of next shot by background characteristics	
Table 7.13A Prevalence and treatment of symptoms of ARI or ARI plus fever	110
Table 7.13B Source of Treatment for children with ARI	
Table 7.13C Knowledge of Proper ARI Treatment	
Table. 7.14 Percentage of children receiving Vitamin A in the last 6 months	116
Table 7.15 Knowledge of importance of Vitamin A	
Table 7.16 Prevalence of diarrhea	120
Table 7.17 Diarrhea treatment	124
Table 7.18 Source of diarrhea treatment	125
Table 7.19 Feeding practices during diarrhea	127
Table 7.20 Knowledge of Proper Diarrhea Treatment	
Table 8.1 Initial breastfeeding	131
Table 8.2A Breastfeeding status by age – City corporations	132
Table 8.2B Breastfeeding status by age – District Municipalities	132
Table 8.2C Breastfeeding status by age – Thana Municipalities	133
Table 8.2D Breastfeeding status by age – All UFHP	
Table 8.2E Breastfeeding status by age – non-UFHP	134
Table 8.3 Median duration and frequency of breastfeeding	135
Table 9.1A Knowledge and awareness of temporary/satellite clinics in UFHP areas	
Table 9.1B Knowledge and Awareness of Temporary/Satellite Clinics in non-UFHP areas	139
Table 9.2 Knowledge of ESP Services at temporary/satellite clinics	141
Table 9.3 Knowledge of ESP Services	
Table 9.4 Usage of Temporary/Satellite Clinics	144
Table 9.5 ESP Services Ever Used at temporary/satellite clinics	
Table 9.6 ESP Services Used in most recent visit in past 3 months at temporary/satellite clinics	
Table 9.7A Quality of Temporary/Satellite Clinics	150
Table 9.7B Quality of Temporary/Satellite Clinics	
Table 9.8. Awareness of clinics and hospitals	
Table 9.9 Type of clinic identifies as providing health and family planning services	
Table 9.10 Knowledge of ESP Services at hospital/clinics	
Table 9.11 Knowledge of ESP Services	
Table 9.12 Usage of Hospital/Clinics	
Table 9.13 ESP Services Ever Used at hospital/clinics	
Table 9.14 ESP Services Used in past 3 months at hospital/clinics	
Table 9.15A Quality of Hospital/Clinics	
Table 9.15B Quality of Hospital/Clinics	
A1. Number of antenatal care visits and timing of first visit	
A2. Source of Antenatal Care	A-2

# LIST OF FIGURES

Figure 1. Source of Modern Contraception, UFHP and non-UFHP areas, 1998 and 2001	X
Figure 2. Current Use of Contraception by Socioeconomic Quintile, UFHP and non-UFHP areas	xi
Figure 3. Source of Contraceptive Method by Socioeconomic Quintile, UFHP and non-UFHP areas	xi
Figure 4. Source of Antenatal Care, UFHP and non-UFHP areas, 1998 and 2001	xii
Figure 5. Use of Antenatal Care by Socioeconomic Quintiles, UFHP and Non-UFHP Areas	
Figure 6. Source of Antenatal Care by Socio-economic Quintile, UFHP and non-UFHP areas	xiii
Figure 7. DPT3 Vaccination, Children 12 to 23 months, by Socioeconomic Quintile, UFHP and non-UF	
areas	
Figure 8. Source of DPT3 Vaccination, Children 12 to 23 months, by Socioeconomic Quintile, UFHP at	
Figure 1.1 Linking Inputs to Outcomes for Evaluating NIPHP Impact (Simplified Framework)	
Figure 2.1 Distribution of Urban Populations by Asset Quintiles, 2001 BDHS and 2001 UFHP Project	
Figure 2.2 Distribution of UFHP Project and Non-Project Populations by Asset Quintiles, 2001 UFHP	
Evaluation Survey	18
Figure 3.1 Distribution of Women's Education Levels by Asset Quintiles, UFHP Project Areas	
Figure 3.2 Distribution of Husband's Education Levels by Asset Quintiles, UFHP Project Areas	
Figure 3.3 Proximity to UFHP Services, UFHP Project Areas	
Figure 4.1 Age-specific Fertility Rates by UFHP and Non-UFHP Areas	
Figure 4.2 Mean Children Ever Born by Asset Quintile, Project and non-Project Areas	
Figure 4.3. Trends in Age-Specific Fertility Rates	37
Figure 5.1 Trends in Method Mix, 1998 and 2001	
Figure 5.2. Modern Contraceptive Use by Married Women by Asset Quintile, Project and non-Project A	
Figure 5.3 Distribution of Sources of Contraceptive Supply in UFHP and non-UFHP areas, 1998 and 20	
Figure 5.4 Discontinuation Rates for All Contraceptive Methods by City Type and UFHP/non-UFHP ar	
Figure 6.1 Infant Mortality Rates, 1987-2001	
Figure 7.1 Trends in Antenatal Care for Births in the Year Preceding the Survey, 1998 and 2001	
Figure 7.2 Percentage of Women with Birth in Year Preceding Survey Using ANC by Asset Quintile, U	
and non-UFHP areas	
Figure 7.3 Sources of Antenatal Care, among users of antenatal care in 12 months preceding the survey,	
and 2001	
Figure 7.4 Percentage of Women Identifying Complications of Pregnancy, UFHP and non-UFHP Areas	87
Figure 7.5 DPT3 Vaccinations for Children 12-23 Months by Asset Quintile, UFHP and non-UFHP Are	
Figure 7.6 Share of UFHP Providers in Total Vaccinations by Antigen, 1998 and 2001	
Figure 7.7 Trends in Vaccination Coverage for Children 12 to 23 months vaccinated at any time before	
survey, 1998 and 2001	
Figure 7.8 Trends in ARI prevalence and treatment seeking behavior, 1998 and 2001	
Figure 7.9 ARI Prevalence, Last 2 Weeks, by Asset Quintile	
Figure 7.10 Vitamin A Received in Last 6 Months, Age Under 5 Years, UFHP and non-UFHP Areas	117
Figure 7.11 Diarrhea Prevalence and Treatment with ORS/Laban gur, by Asset Quintiles, UFHP Project	Areas
Figure 7.12 Trends in the Children with Diarrhea Receiving Treatment, 1998 and 2001	
Figure 9.1 Mean Expenditure (Taka) and Mean Waiting Time (Minutes) Among Users of UFHP Satelli	
Clinics	
Figure 9.2 Mean Expenditure (Taka) and Mean Waiting Times (Minutes) Among Users of UFHP Station	
Clinics	162

#### **SUMMARY**

The 2001 Urban Family Health Partnership (UFHP) Evaluation Survey was designed to evaluate the progress of the UFHP program in delivering an Essential Service Package (ESP) of primary health care interventions in under-served urban populations of Bangladesh. Fieldwork was conducted from May through September 2001. Data were collected first on communities and then on the health facilities serving those communities. Data were subsequently collected from 5,414 women in areas served by the UFHP program and from 1,780 women in non-UFHP areas. The data focus primarily on knowledge and use of services related to family planning, maternal and child health, and awareness and use of UFHP facilities. The survey itself has two main purposes: (1) to collect information relevant to monitoring the progress of the project as specified in USAID's NIPHP Results Framework and (2) to provide data for evaluating the impact of the UFHP program on improving the health status of the population in UFHP areas and in expanding access to ESP services. The basic results from the household and individual questionnaires are the focus of this report and are summarized in the text below.

- The UFHP program has been successful in targeting certain essential services to poor and underserved populations. While populations living in areas designated as UFHP areas do not appear any more or less poor than populations in urban areas of Bangladesh nor than the surveyed populations in comparison areas, the poor in UFHP areas are more likely to use UFHP providers for modern contraception, antenatal care, childhood vaccinations and other essential services than the non-poor.
- There have been significant improvements in the use of antenatal care, vitamin A, and ORT in UFHP areas since 1998. At the same time, there have been declines in the use of other essential services, including several childhood vaccinations and treatment of ARI at a health provider. The contraceptive prevalence rate is largely unchanged.
- The share of UFHP providers in antenatal care, modern contraception, and childhood immunizations has increased since 1998. The share of UFHP providers for treatment of ARI and diarrhea is negligible. In fact, treatment of ARI at a health provider has declined overall since 1998.
- There is considerable overlap between areas designated as UFHP catchment areas and the non-UFHP comparison areas. For many services, the levels of utilization of UFHP providers are nearly the same in both areas.

Contraceptive Use: Modern contraception was used by 50.7 percent of currently married women. This was nearly identical to the 50.3 percent of currently married women using modern contraception in the 1998 Baseline Survey. Modern contraceptive use was slightly higher in 2001 in non-UFHP areas, at 53.9 percent of currently married women. In UFHP areas, use of any contraceptive method increased from 59.9 percent to 60.7 percent of women. Pills continue to be the preferred method, used by 25.1 percent of women. This represents a four-percentage point decrease from the Baseline Survey (29.2 percent). This decrease was offset by increases in other methods such as condoms and injections. Condom use increased from 7.7 percent to 9.6 percent of currently married women, as did injection use, from 5.4 to 8.0 percent of currently married women. Use of any traditional method remained almost unchanged at 10 percent of currently married women.

In 2001, UFHP facilities provided 11.7 percent of modern contraception supply, with 6.7 percent through satellite clinics and the remainder through static clinics (Figure 1). This marks an increase from the 7.2 percent market share in 1998. UFHP clinics provide approximately 45 percent of the injectable methods and over half of all implants. They also provided 22.7 percent of all IUDs. The market share of UFHP clinics for women living in non-UFHP areas was nearly the same – approximately 10 percent – as it was in UFHP areas, indicating that the geographical boundaries of UFHP and non-UFHP comparison areas are almost unexistent.

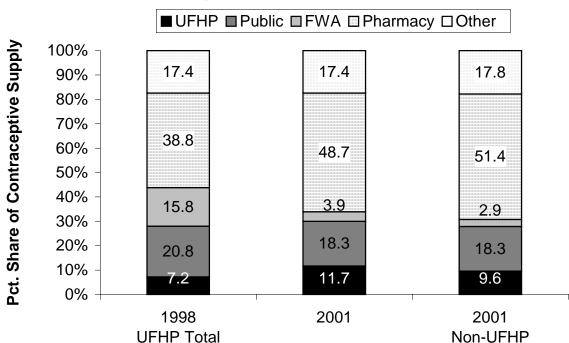


Figure 1. Source of Modern Contraception, UFHP and non-UFHP areas, 1998 and 2001

The gap in the rates of contraceptive use between the rich and the poor is considerably smaller in UFHP areas than in non-UFHP areas (Figure 2). The rich are only 1.5 percentage points more likely to use modern contraception than the poor in UHFP areas. In contrast, there is nearly a 10 percentage point difference in the use of modern contraception between the poor and rich in non-UFHP areas -44 percent versus 53.4 percent. This pattern is evident for other services as well.

In terms of sources of modern contraception, however, there are substantial differences between the rich and poor in both UFHP and non-UFHP areas (Figure 3). In both areas, the poor are several times more likely to use UFHP providers than the rich. This gap is larger in non-UFHP areas. In both areas, the vast majority of the rich use private sources or pharmacies as their sources of modern contraception. Only a third of the poor in both UFHP areas and non-UFHP areas use such sources.

Figure 2. Current Use of Contraception by Socioeconomic Quintile, UFHP and non-UFHP areas

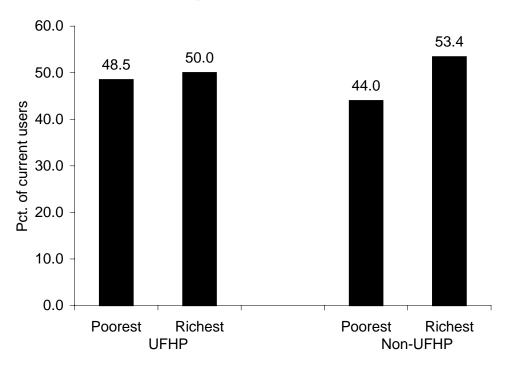
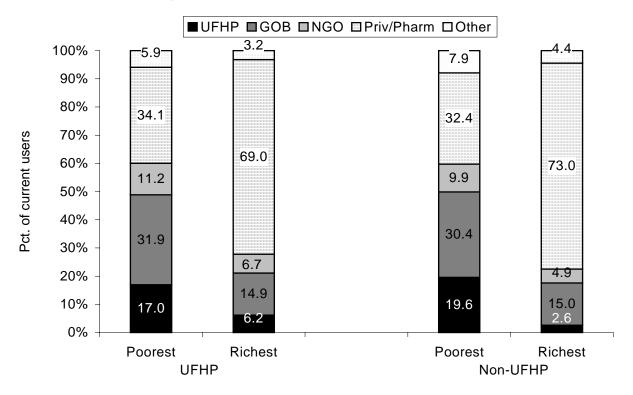


Figure 3. Source of Contraceptive Method by Socioeconomic Quintile, UFHP and non-UFHP areas



Antenatal Care: For women with a birth in the year preceding the survey, 79.2 percent sought antenatal care. This was significantly higher than the proportion, 65.2 percent, of women using antenatal care in the year preceding the 1998 survey, indicating a positive trend in ANC use. The median number of antenatal care visits was 2.9 visits per pregnancy, which is identical to the level in non-UFHP areas. This number ranged from 2.5 visits in Thana Municipalities to 3.2 visits in City Corporations. Only 36 percent of women received antenatal care within the first three months of pregnancy, while another 25 percent did not receive the care until they were four or five months pregnant. Nearly 59 percent of women in UFHP areas received iron supplementation during their pregnancies.

The share of UFHP clinics in providing antenatal care doubled from 11.2 percent in the 1998 survey to 22.3 percent in the 2001 survey (Figure 4). The share of UFHP clinics in providing antenatal care to women living in non-UFHP areas was approximately two-thirds the rate observed in UFHP areas at 14.8 percent of antenatal care users, indicating significant spillover across UFHP and non-UFHP areas.

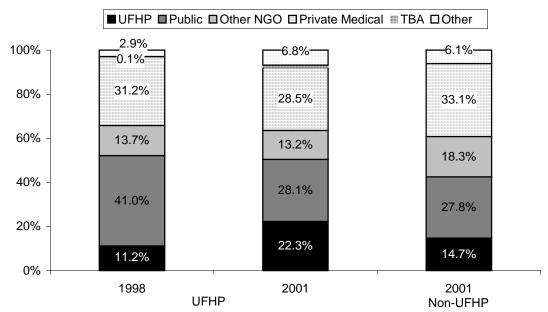


Figure 4. Source of Antenatal Care, UFHP and non-UFHP areas, 1998 and 2001

There are considerable gaps between the rich and the poor in overall use of antenatal care. Over 95 percent of women in the richest socioeconomic quintile seek antenatal care in UFHP areas as compared with only 55.3 percent of women in the poorest quintile (Figure 5). This gap is even larger in non-UFHP areas; 100 percent of women in the richest quintile seek care but less than half of those women in the poorest quintile do.

As with modern contraception, UFHP facilities provide a significant share of antenatal care to women in the poorest quintile, but less so to women in the richest quintile. The share of UFHP providers of antenatal care for women in the poorest quintile in UFHP areas is approximately one-third (Figure 6). However, only 2.9 percent of women in the richest quintile use UFHP providers. These rates are comparable in non-UFHP areas, where 24.3 percent of women in the poorest quintile use UFHP providers but only 2.6 percent of women in the richest quintile do.

Figure 5. Use of Antenatal Care by Socioeconomic Quintiles, UFHP and Non-UFHP Areas

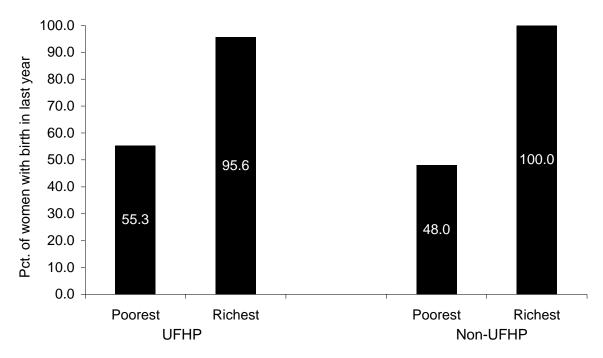
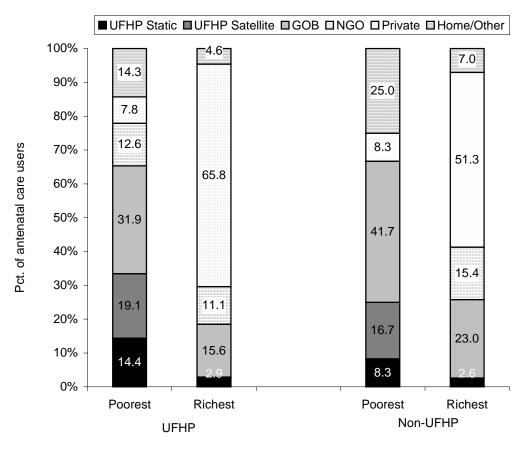


Figure 6. Source of Antenatal Care by Socio-economic Quintile, UFHP and non-UFHP areas



Childhood Vaccinations: Little improvement and, in fact, slight declines were observed in the coverage rates of several of the basic childhood immunizations since the 1998 survey (Table 1). Vaccination rates for children 12 to 23 months were 95.4 percent for BCG, 75.1 for DPT3, 83.7 percent for polio3 and 74.8 for measles. The proportion of children fully vaccinated was 62.4 percent. In 1998, the corresponding vaccination rates were 92.1 percent for BCG, 78.3 percent for DPT3, 83.4 percent for polio3 and 76.3 percent for measles. In 2001, the proportion of fully vaccinated children aged 12 to 23 months was 62.4 percent, 5.5 percentage points lower than the coverage rate in 1998.

Vaccination rates were slightly higher in non-UFHP areas in 2001. In UFHP areas, vaccination rates were generally higher in City Corporations, except for polio vaccination rates, which were highest in District Municipalities. Drop out rates for DPT3 were 19 percent; for polio, they were only 10 percent. In the 1998 Baseline Survey, drop out rates were 17 and 15 percent for DPT and polio respectively. More than half of mothers, approximately 57 percent, whose children were partially vaccinated (and who had vaccination cards) knew when the child's next immunization was scheduled.

The share of UFHP clinics in provision of childhood immunizations increased to approximately 27 to 30 percent of all immunizations, up from approximately 23.7 percent in 1998 (Table 2). The share of UFHP clinics in provision of childhood immunizations to children in non-UFHP areas was also considerable, at approximately 19 percent of all immunizations.

Socioeconomic status is positively associated with vaccination rates in both UFHP and non-UFHP areas, as well as with the source of vaccination (Figure 7). Children in the richest quintile in UFHP areas were approximately 26 percentage points more likely to receive a DPT3 vaccination than children in the poorest quintile. This gap was slightly larger in non-UFHP areas. For children in the poorest quintile, UFHP providers account for 43 percent of all vaccinations. This rate is only 21 percent for children in the richest quintile (Figure 8).

Table 1. Percent of children 12-23 months old vaccinated any time before the survey

Antigen	UFHP Project Areas		Non-UFHP Areas
	1998	2001	2001
BCG	92.1	95.4	95.1
DPT 3	78.3	75.1	77.0
Polio 3	83.4	83.7	83.7
Measles	76.3	74.8	78.3
All antigens	67.9	62.4	65.8

Table 2. Percent of Immunized Children Receiving Vaccinations from UFHP Facilities

Antigen	UFHP Project Areas		Non-UFHP Areas
	1998	2001	2001
BCG	23.9	26.8	17.2
DPT 3	21.0	29.7	19.8
Polio 3	21.6	27.1	16.9
Measles	25.0	26.6	20.2

Figure 7. DPT3 Vaccination, Children 12 to 23 months, by Socioeconomic Quintile, UFHP and non-UFHP areas

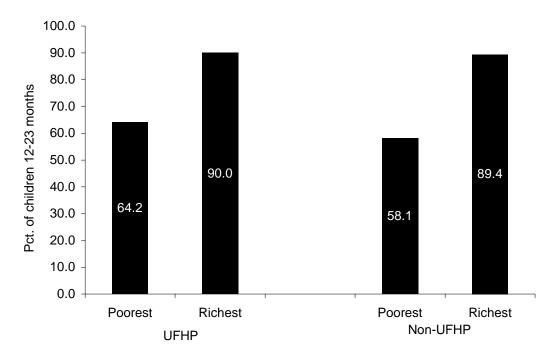
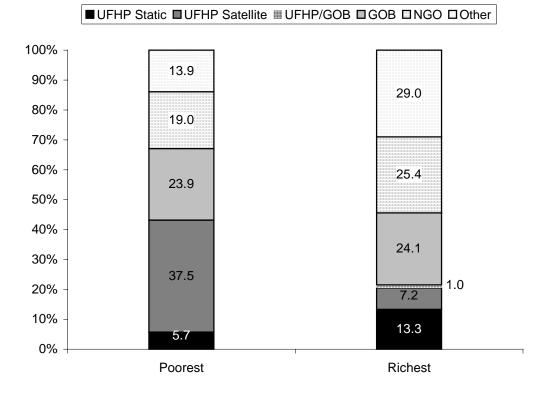


Figure 8. Source of DPT3 Vaccination, Children 12 to 23 months, by Socioeconomic Quintile, UFHP areas



Child Health: There has been noticeable improvement in several indicators of child health since the 1998 Baseline Survey. The proportion of children receiving vitamin A in the 6 months preceding the survey increased from 65.2 percent to 70.6 percent. The rate in the 2001 non-UFHP areas was slightly higher at 73.4 percent of children.

The proportion of children with diarrhea who were treated with ORT – either packet ORS or *laban gur* solution - increased from 77.0 percent to 82.5 percent. The 2001 level for children in non-UFHP areas was nearly identical; 82.4 percent of children with diarrhea received ORT. UFHP clinics were only minor sources of provision of diarrhea treatment in both 1998 (1.1 percent) and 2001 (1.6 percent).

According to the 2001 Survey, most children were breastfed for up to 24 months, though the period of exclusive breastfeeding was quite short. Only 44.9 percent of children under age 2 months were exclusively breastfed. Most children 6 to 9 months were receiving breast milk supplemented with complementary foods (66 percent), other milk (13 percent), or plain water (10 percent).

In some cases, there has been a worsening of treatment behaviors. The proportion of children with symptoms of ARI who were taken to a health facility decreased from 54.1 percent to 30.5 percent, a rate lower even than the ARI treatment rate in urban areas in the 1999/2000 BDHS. Treatment by any source – medical or non-medical - was 77.3 percent, slightly lower than the 79.8 percent in non-UFHP areas. ARI prevalence, however, was identical at 18 percent to the 1998 Baseline Survey rate. The share of UFHP providers in ARI treatment remained nearly the same - 1.3 percent of care-seekers in 1998 and 1.7 percent of care-seekers in 2001.

Awareness and Use of UFHP Services: In UFHP areas, 57.5 percent of women were aware of satellite clinics in the areas in which they live, though only 84.5 percent of these women reported that the clinic had been held in the past 3 months. The most commonly identified satellite clinics were UFHP satellite clinics, identified by 57.6 percent of women who knew of satellite clinics held in the previous three months. Family planning and maternal and child health services, particularly ANC and EPI services, were well known to respondents identifying UFHP satellite clinics. However, only 14.5 percent of women who knew of UFHP satellite clinics had ever used them, and only 6 percent used them in the last 3 months. Satisfaction with UFHP satellite clinics among users was high, including general satisfaction with waiting times and fees. Nearly all users rated staff treatment, quality of care, and cleanliness of the clinics as "good" or "very good." Over 90 percent of women in UFHP areas could also identify a hospital or clinic in their area which offers health or family planning services. Of these women, 20.4 percent identified UFHP static clinics. Identification of ESP services at UFHP static clinics focused on family planning methods, maternal health, and child health services. Ten percent of women identifying hospitals/clinics had used UFHP static clinics. As with UFHP satellite clinics, satisfaction with UFHP services at static clinics was high. Expenditures were generally felt to be "reasonable" and tended to be lower than those at other NGO and private clinics. Again, over 90 percent of users of UFHP static clinics rated staff treatment, quality of care, and cleanliness of the clinics as "good" or "very good."

Knowledge of Health Promotion Behaviors: Knowledge of health services and health promotion behaviors varied by the type of service. Nearly all women could name three family planning methods. Nearly three quarters of women identified female sterilization as an appropriate method for limiting births; 79.1 percent of women identified oral contraceptives as an appropriate method for spacing births. Only 6.4 percent of women could not identify a complication of pregnancy that could be life threatening and require medical care, although, except for tetanus, only about one-third of respondents had knowledge of other life-threatening conditions such as eclampsia and prolonged labor. Most women (94 percent) also knew to treat diarrhea with ORT. Two thirds of women knew to take their child to a health facility if symptoms of ARI appear. Only 16 percent of women knew the recommended number of TT vaccinations.

*Fertility:* The total fertility rate in UFHP areas for the three years preceding the survey was 2.4 births per woman, nearly identical to the rate of 2.5 births per woman in the 1999/2000 Bangladesh Demographic and Health Survey. Fertility has been declining in all areas, but more rapidly in UFHP areas. Fertility declined by 0.8 births per woman in UFHP areas, from 3.3 births in the 5 to 10 year period preceding the survey to 2.5

births per woman in the 0 to 5 year period preceding the survey. The decline in non-UFHP areas was only 0.5 births per woman, from 3.1 to 2.6 births. Declines were fairly uniform across the 3 UFHP city types, although women in Thana Municipalities continued to have one additional birth in their lifetimes relative to women in City Corporations and District Municipalities.

Early Childhood Mortality: The infant mortality rate in UFHP areas in the 5 years preceding the survey was 53 deaths per 1,000 live births. For the same period, the child mortality rate was 20.4 deaths per 1,000 live births, while the under 5 mortality rate was 72.3 deaths per 1,000 live births. The infant mortality rates in UFHP areas by city types were 47.5 in City Corporations, 59.1 in District Municipalities and 52.6 in Thana Municipalities. Mortality rates have declined in all areas over the past 15 years, more rapidly in the last 5 years, and at the fastest rate in Thana Municipalities.

INDICATOR	1998 Baseline	2001 UFHP Evaluation
	Survey	Survey
SO: Fertility reduced; family health improved		
Total fertility rate 15-49 (3 year recall)	X	2.4
Infant Mortality Rate	X	53.0
Child Mortality Rate	X	20.4
Under 5 Mortality Rate	X	72.3
IR 1: Increased use of high-impact elements of an "Essential Service Packa	ige" among ta	rget
populations, especially in low-performing areas.		
Contraceptive prevalence rate (modern methods) among currently r		
Any method	59.9	60.7
Any modern method	50.3	50.7
Pill	29.2	25.1
IUD	1.5	1.2
Injection	5.4	8.0
Condom	7.7	9.6
Female Sterilization	5.8	6.0
Male Sterilization	0.3	0.3
Norplant	0.4	0.6
Any traditional	9.6	10.0
Not Using Any method	40.1	39.3
Contraceptive prevalence rate (modern methods) among married ac		
Age 10-14	26.3	17.9
Age 15-19	40.8	43.0
Percent of children age 12-23 months who received specific vaccing		
time before the survey (source is either vaccination card or mother)		
BCG	92.1	95.4
DPT3	78.3	75.1
Polio3	83.4	83.7
Measles	76.3	74.8
All	67.9	62.4
Percent of children (6-59 months) receiving vitamin-A capsules	65.2	70.6
semi-annually	03.2	70.0
Percent of child diarrheal episodes treated with ORT in target popu	lations	
Packet ORS	71.3	80.4
Laban gur saline	17.7	17.1
Oral Rehydration Therapy (ORS or <i>laban gur</i> )	77.0	82.5
Percent of child ARI cases treated in target populations	77.0	02.5
Health Facility	53.7	20.5
•		30.5
Percent of live births for which women in target populations made  Women >6 months pregnant or live birth in last 1 year		visits, by age
	66.2	70.2
Women with a live birth in last 1 year	65.2	79.2
Percent of pregnant women taking iron supplementation		58.9
IR 2: Increased knowledge and changed behaviors related to high-priority in low-performing areas.	health proble	ms, especially
Percent of married women in catchment populations that can name	available ESP	services
related to maternal health, reproductive health, child health  Static Clinic	avanaule ESF	SCIVICCS
	-	

		1998	2001 UFHP
	INDICATOR	Baseline	Evaluation
		Survey	Survey
	Clinical FP Method	50.9	48.9
	Non-clinical FP Method	69.2	45.3
	Advice for side effects	6.7	3.0
	ANC	63.4	55.4
	PNC	18.0	19.9
	EPI	64.3	64.3
	Oral Saline	11.7	3.7
	Satellite Clinic		
	Clinical FP Method	23.6	35.7
	Non-clinical FP Method	48.2	38.0
	Advice for side effects of family planning use	5.4	2.9
	ANC	61.6	41.8
	PNC	13.2	5.1
	EPI	83.3	78.6
	Oral Saline	6.9	2.1
	Percent of potential clients who can describe three family mo	dern planning metho	ds including
	indications for use:		_
	Know three methods	X	98.6
	Know for limiting		
	Female Sterilization	X	73.4
	Male Sterilization	X	5.5
	Pill	X	22.0
	IUD	X	8.9
	Injection	X	16.9
	Implants	X	5.2
	Condoms	X	5.2
	Know for spacing		
	Female Sterilization	X	1.2
	Male Sterilization	X	0.1
	Pill	X	79.1
	IUD	X	17.6
	Injection	X	44.4
	Implants	X	7.8
	Condoms	X	37.9
	Percent of mothers who know when their child's next immun		
	vitamin-A; how to respond to childhood diarrhea and ARI, da		
	(a) When child's next immunization due	anger signs or pregna	
	DPT3	X	57.9
	Polio3	X	56.4
	Both	X	56.2
	(b) Importance of vitamin A	A	30.2
	To prevent night blindness	X	26.4
	To increase resistance to infections	X	14.6
	To improve child's health	X	41.7
	(c) How to respond to childhood diarrhea	Λ	71./
	Give homemade ORS/laban gur	v	40.1
	Treat with ORS	X	94.2
	Take child to health facility/consult a doctor	X	
ļ	rake child to health rachity/consult a doctor	X	64.2

	1998	2001 UFHP
INDICATOR	Baseline	Evaluation
	Survey	Survey
(d) How to respond to childhood ARI		
Take child to health facility	Х	63.9
Consult a doctor	х	50.2
(e) Percent of married women who know the danger signs for pregnar	ncy and how	to react
Know danger signs		
Tetanus	X	54.1
Obstructed Labor	X	37.1
Convulsions/Eclampsia	X	31.6
Retained Placenta	X	25.7
Poor positioning of fetus	х	24.7
Excessive vaginal bleeding	х	22.7
Don't Know	х	6.4
Seek medical care	х	
(f) Percent of married women who know the recommended number of TT vaccinations	х	16.2
Percent of women who exclusively breastfeed, by 2 month intervals		
0-1 month	х	44.9
2-3 months	х	27.6
4-5 months	х	11.7
6-7 months	х	1.9
8-9 months	х	2.3
10-11 months	х	0.4
IR 3: Improved quality of services at NIPHP facilities		
Drop-out rates for EPI		
DPT3	X	19.3
Polio3	X	10.0
Contraceptive Method Discontinuation Rates		
Oral Contraceptives	X	51.8
IUDs	X	35.6
Injectables	X	54.8

#### **CHAPTER 1. INTRODUCTION**

#### 1.1 Background on the Urban Service Delivery Partnership

The Urban Family Health Partnership (UFHP) is the urban component of the National Integrated Population and Health Program (NIPHP), a USAID-funded seven-year, US\$230 million project. The purpose of the NIPHP program is to promote the delivery and use of an Essential Service Package (ESP)<sup>1</sup> of family planning and family health services at fixed site clinics in under-served areas of Bangladesh.

The focus of the project on providing an Essential Service Package is a reflection of the realization that efforts to reduce fertility below its current level of 3.3 per woman – a level that has been relatively stable over the past decade - requires a switch from focusing solely on contraceptive use primarily through doorstep delivery to making improvements in maternal and child health, particularly high infant and child mortality rates. Reducing mortality requires addressing its proximate determinants - poor birth spacing, poor maternal and child health and nutrition, and inadequate use of preventive health services - through wider access to the Essential Services Package.

UFHP is a partnership of 24 NGOs, providing services in the four City Corporations of Bangladesh (Dhaka, Chittagong, Khulna, and Rajshahi cities) and in urban areas under district and Thana Municipalities. It includes 144 static clinics, 71 upgraded satellite clinics, 357 satellite teams, and 8,436 satellite clinic sessions. This report therefore represents a mid-project analysis of the efforts of UFHP to promote the use of the Essential Service Package.

#### 1.2 Objectives of the Survey

The survey has two principal objectives:

- ◆ To monitor changes in the USAID NIPHP Results Framework indicators since the Baseline Survey in 1998; and,
- ◆ To provide data on individual behaviors and health outcomes and to link these data with characteristics of the service supply environment in order to conduct an evaluation of the impact of the UFHP program.

The NIPHP Results Framework Performance Indicators are designed to monitor changes both in health outcomes – the strategic objective – and 5 intermediate behavioral and knowledge areas. These are summarized in Table 1.1. The overall strategic objective of the project is to reduce fertility and to improve family health. The intermediate results include: (IR1) increased use of an Essential Service Package, (IR2) increased knowledge and changed behaviors, (IR3) improved quality of services at UFHP facilities, (IR4) improved management of UFHP service delivery organizations, and (IR5) increased sustainability of UFHP service delivery organizations. Indicators are provided for the strategic objective and each of the intermediate results. In order to collect information on these indicators, information is collected through household and individual questionnaires on health behaviors, knowledge and outcomes.

\_

<sup>&</sup>lt;sup>1</sup> The Essential Service Package includes services in the following areas: reproductive health (family planning and maternal care), child health (EPI, ARI, CDD), communicable disease control (RTI and STD prevention and treatment, HIV/AIDS), and limited curative care.

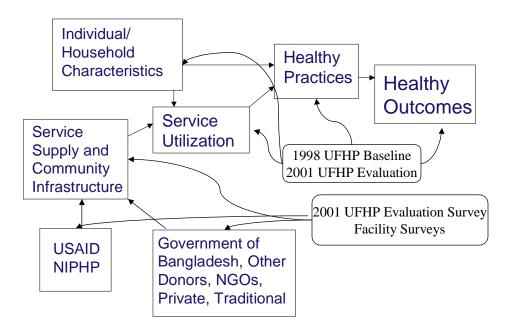
Table 1.1 NIPHP Results Framework Monitoring Indicators

Monitoring indicators by Strategic Objective (SO) and Intermediate Results (IR) area

Obj.	Area	Indicators
SO	Reduced fertility rates and improved family health	Total fertility rate; infant and child mortality rates; non-polio acute-flaccid-paralysis rate; prevalence of childhood night blindness; HIV sero-prevalence
IR1	Increased use of an Essential Service Package	Contraceptive use; immunization coverage; vitamin-A; ORT treatment for diarrhea; use of ARI treatment; antenatal care
IR2	Increased Knowledge and Changed behaviors	Knowledge and awareness of ESP services; knowledge and awareness of proper health behaviors related to family planning, diarrhea/ARI treatment
IR3	Improved Quality of Services at NIPHP facilities	Service delivery standards; trained staff; immunization and contraceptive discontinuation rates
IR4	Improved management of NIPHP service delivery organizations	Data for decision-making; financial management; stock-outs
IR5	Increased sustainability of NIPHP service delivery organizations	Cost-recovery

As there are many factors at work in the health sector, monitoring indicators alone are insufficient for assessing the relative contribution of the UFHP program to changes in the health sector. Assessing program impact requires looking at changes in health behaviors and health outcomes, and distinguishing the contribution of the UFHP program to these changes relative to the contribution of other factors that may have led to these changes. Many factors can affect service utilization and health practices. At the individual and household levels, wealth, education levels, age, women's autonomy, and attitudes all tend to affect the use of health services and health outcomes. Equally important, of course, are factors on the supply-side – both UFHP and non-UFHP. Regardless of individual or household characteristics, services cannot be used if they are not available or are of such low quality that they are not perceived to be effective in addressing health needs. For this reason, this survey collects data from several areas: (1) households and individuals, (2) villages and communities, and (3) health facilities and service providers in the communities where the sample population lives. Data on households and individuals present information on the level of health knowledge and health behaviors of the population while data on the latter two components - villages and facilities- present information on the supply environment – the accessibility and quality of available health services. Further, by collecting information on populations and services in areas served both by the UFHP program and in areas without the UFHP program, the relative contribution of the UFHP program to any changes can be evaluated.

Figure 1.1 Linking Inputs to Outcomes for Evaluating NIPHP Impact (Simplified Framework)



#### 1.3 Organization of the Survey

#### Sample Design

For purposes of sampling for the NIPHP survey, urban areas covered with the program were first classified into the three types as: city corporation areas, District Municipalities, and Thana Municipalities. Project samples for the urban (UFHP) part of the survey were then drawn in three main strata, with one stratum constituted with wards covered with the program in city areas, one stratum with those from District Municipalities and one stratum with those from Thana Municipalities. In addition, a sample of non-project areas (that is, areas outside of the program) was drawn from a fourth main stratum constructed with those areas from all types of urban centers having NIPHP services. This sample is intended to be used as a control group for comparisons with the project samples.

Samples were chosen from a total of 200 sample clusters, a cluster being equivalent to a mahalla or part of a mahalla. Table 1.2 below gives the estimated population size and the number of selected sample clusters, by main strata.

Table 1	Table 1.2 Population size and number of clusters									
Strata	Description	Estimated Population Size	Number of chosen site							
	Project Areas									
1	City Areas	4,541,323	55							
2	District Municipality Areas	5,169,817	61							
3	Thana Municipality Areas	1,147,392	34							
	Project Areas (Sub-Total)	10,858,532	150							
4	Non-Project Areas	4,079,012	50							
	Total	14,937,544	200							

Of the chosen clusters, 150 clusters were selected from project areas, including 55 clusters from city corporation areas (Stratum-1), 61 clusters from District Municipalities (Stratum-2) and 34 clusters from Thana Municipalities (Stratum-3). The remaining 50 clusters were drawn from non-UFHP areas (Stratum-4).

Project wards (or wards covered by UFHP at the time of the current survey) were classified into two categories: old wards and new wards. Old wards are wards that were also under the program at the time of the 1998 Baseline Survey, while the new wards are wards that were not under the program at the time of the baseline survey, but included thereafter.

Each main stratum, except stratum-4 (non-project stratum), was classified into two sub-strata, with one sub-stratum comprising old wards and the other comprising the new wards. There was no sub-stratification needed for stratum-4 since categorization by old and new wards was irrelevant for non-project areas. In each stratum (except stratum-4), samples were drawn independently from the old and new wards. Samples drawn from old wards are labeled as old samples and those from new wards as new samples. Table 1.3 shows the estimated population size and the number of selected clusters, by sub-strata, according to specific main strata.

Table 1.3 Population size and nur	mber of clusters by	/ sub-strata							
Sub-Strata									
Description	Old		Nev	v	Total				
	Population	# of	Population	# of	Population	# of			
		Clusters	1	Clusters	-	Clusters			
City Areas	4,275,827	52	265,496	3	4,541,323	55			
District Municipality Areas	3,057,211	36	2,112,606	25	5,169,817	61			
Thana Municipality Areas	773,624	23	373,768	11	1,147,392	34			
Project Areas (Sub-Total)	8,106,662	112	2,751,870	38	10,858,532	150			
Non-Project Areas	_	_	_	_	4,079,012	50			
Total					14,937,544	200			

4

For every selected cluster (mahalla), 250 to 350 households were usually listed, proceeding from the north west corner of the mahalla in a systematic fashion and covering a clearly defined locality. A total of 7,000 households were selected as the ultimate sample. Table 1.4 shows the distribution of this sample by main strata/sub-strata.

<u>Table 1.4 Household Samples</u>			
		Sub-Strata	
Description	Old	New	Total
City Areas	1,820	105	1,925
District Municipality Areas	1,260	875	2,135
Thana Municipality Areas	805	385	1,190
Project Areas (Sub-Total)	3,885	1,365	5,250
Non-Project Areas			1,750
Total			7,000

#### 1.4 Training and Fieldwork

For the UFHP areas as a whole, 5,285 households were selected for interview (Table 1.5). Of these, 5,175 were occupied and 5,156 households were interviewed, giving a household response rate of 99.6 percent. In these households 5,749 eligible women – ever-married women aged 10 to 49 years – were identified for interviewing. Of these, 5,414 women (94.2 percent) were interviewed. Household and eligible women response rates were consistent across all three city types. Household and eligible women response rates were slightly higher in non-UFHP areas.

Table 1.5 Results of the household and individual interviews
Number of households, number of eligible women interviewed and response rates, according to residence, by city type
and HEHP/non-HEHP area

Result	City	District	Thana	UFHP	Non-UFHP	Total
Household interviews						
Households selected	1,925	2,170	1,190	5,285	1,750	7,035
Households occupied	1,875	2,125	1,175	5,175	1,712	6,887
Households interviewed	1,867	2,119	1,170	5,156	1,708	6,864
Household response rate	99.6	99.7	99.6	99.6	99.8	99.7
Individual interviews: women						
Number of eligible women	2,085	2,379	1,285	5,749	1,877	7,626
Number of eligible women interviewed	1,964	2,238	1,212	5,414	1,780	7,194
Eligible woman response rate	94.2	94.1	94.3	94.2	94.8	94.3

#### 1.5 Selection of Facilities

A detailed protocol was employed for collecting the community, facility and satellite clinic information. During household listing visits to communities, listing teams identified 3-6 community respondents who could be interviewed in a group for the village/mahalla questionnaire. It was intended that the community respondents include at least one educator, at least one female community leader and several local government officials.

During the village/mahalla interview, respondents identified the different sources of health services known to be available in the area and obtained approximate distances from the communities to the health service sources. After the village/mahalla questionnaire was completed, a list of facilities form was completed for the cluster. The facility survey teams in the cluster then visited the UFHP static clinic in the cluster and asked the facility manager to review the map of the ward depicting the location of the static clinic and the catchment area. In general, this map also showed other health facilities in the ward. The survey team compared the list of facilities identified by the community respondents to the facilities presented in the ward map to identify facilities that were not mentioned by the community respondents but that were located in the ward. The list of facilities form was completed with that additional information. A list of facilities form was prepared for every cluster.

The procedure to identify the relevant facilities and the selection for the facility survey varied according to the type of facility:

For *Hospitals*, the closest to the cluster was identified. If it was within 30 kilometers, it was visited, and an interview was attempted.

Each *Thana Health Complex* in a Thana was visited regardless of distance. If there was a closer Thana Health Complex located in a different thana, an interview was also attempted, if mentioned in the Village/Mahalla questionnaire.

For Maternal and Child Welfare Centers (MCWCs), and Family Welfare Centers (FWCs), the closest of each type was identified. If the closest facility was located in a different ward than that of the cluster, then the facility in the cluster's ward was also identified. A maximum of two facilities for each type could be identified and selected for the facility survey visit. For FWCs, the closest one regardless of the distance to the cluster was visited. For MCWC, the closest one was visited if distance was less than 10 km.

One UFHP static clinic was identified per cluster (in UFHP areas) and visited regardless of distance.

For *Private clinics, Other NGO clinics, GOB Community Clinics and Rural Dispensaries*, all those known to be available to the people in the cluster (up to a maximum of four for each type) were obtained, including names and approximate distances. The nearest three of each type were visited, unless they were beyond 10 kilometers.

For Satellite Clinics (UFHP, other NGO or Government), all satellite clinics known to be available or that provide services in the cluster were identified with their names and approximate distances. All satellite clinics located within 1 mile from the cluster were selected as those to be visited by facility survey teams. If none were located within 1 mile, the closest of each type (NIPHP, other NGO or Government) was visited regardless of distance.

For *Pharmacies*, private allopathic doctors, homeopathic doctors and traditional doctors/village practitioners/ayurvedic/unani doctors, there was a set of questions in the village/mahalla questionnaire to identify their presence and number in the surrounding area. The distance to the closest one of each type was recorded. However, these were not selected for the facility survey visit.

For FWAs, there was a set of questions to identify their presence in the cluster, and the nearest to the cluster was visited.

Table 1.6 provides a summary of the selection strategy.

Satellite Clinics: Because the satellite clinic sessions occurred only once per week or once per month, it was unlikely that the timing of the visit by survey teams corresponded to the day on which a particular satellite clinic occurs. However, facility survey teams went to the satellite clinic locations and collected information on the physical appearance of the satellite clinic and took GPS coordinates. In most cases, the remainder of the satellite clinic questionnaire was completed elsewhere with the actual satellite clinic worker, either at the static clinic with which the worker is affiliated or at the worker's home.

Health Workers: Health workers were selected for interview at FWCs, MCWCs, NGO clinics, private clinics, UFHP static clinics, community clinics and rural dispensaries. Only those workers involved in providing ESP services were interviewed. In facilities with fewer than 5 ESP workers, all ESP workers were identified and given the Health Worker Questionnaire. For facilities with 5 or more ESP workers, one of each staff type was identified and given the Health Worker Questionnaire. The lowest level of health worker to be interviewed was the Health Assistant. Clinic Aides were not interviewed.

### <u>Table 1.6 Selection of Facilities for Interview</u>

Criteria for selection of health facility types to be interviewed, survey instrument used, and selection of health staff for interview

	Sources	Frequency	Identified in Community Questionnaire	Number Selected for Interview	Questionnaire		for WORKER estionnaire
						Number In post	Number selected for Interview
01	Hospitals	1/district	1-2	closest 1-2, within 30 km	HOSPITAL		0
02	Thana Health Complexes	1/thana	1-2	1-2, at least 1	FACILITY		0
03	FWCs	1/union	1-2	1-2, at least 1	FACILITY	1-2	All
04	MCWCs	1-2/district	1-2	1-2, at least 1	FACILITY	2-3	All
05	UFHP Static Clinics	1/cluster	1-2	1-2, at least 1	FACILITY	4-5	*
06	Private Clinics	several	All	Nearest 3, at least 1 if < 10 kms.	FACILITY	4-5	*
07	Other NGO Clinics	several	All	Nearest 3, at least 1 if < 10 kms.	FACILITY	4-5	*
08	Community Clinics	several	All	Nearest 3, at least 1 if < 10 kms.	FACILITY	1-2	All
09	Rural Dispensaries	several	All	Nearest 3, at least 1 if < 10 kms.	FACILITY	1-2	
10	Satellite Clinics	several	All	All if < 1 mile, at least 1 per type	SATELLITE	1-2	All
11	FWV/FWA	several	Special Question	Closest, at least 1 per cluster	WORKER	1	1
	Pharmacies	several	Special Question	No			
	Doctors' Offices (allopathic MBBS)	several	Special Question	No			
	Village Practitioners (homeopathic & ayurvedic/unani)	several	Special Question	No			

<sup>\*</sup> If # of ESP staff >5, selected sample of one per type If # of ESP staff<=4, all interviewed.

#### CHAPTER 2. HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

This chapter presents background information on the sample of households and household members interviewed in the survey. Specifically, it presents information on the age structure of the interviewed household members, the composition of households, the characteristics of households and ownership of common assets.

#### 2.1 Age and sex composition

The age structure of the household population is shown in Table 2.1A and Table 2.1B, by sex, residence, and age. For the UFHP sample as a whole, approximately 35 percent of the population was under the age of 15. For UFHP areas, the child dependency ratio – the ratio of children aged 0-14 years to adults aged 15-59 – was approximately 59 percent, while the old age dependency ratio was approximately 4.5 percent. The age dependency ratio in non-UFHP areas – which reflects a higher proportion of city municipalities than the UFHP population – had a lower dependency ratio of 54 percent. Among UFHP city types, Thana Municipalities, which had higher fertility, had a higher proportion of the population under the age of 15 (39 percent) than in City Corporations (34 percent) and District Municipalities (35 percent). A slightly higher proportion of the male population was in younger age groups than the female population, but the differences were slight.

Table 2.1A Household population by age, sex and residence

Percent distribution of the de facto household population by five-year age group, according to sex and residence, by city type and UFHP/non-UFHP

	City			District			Thana		UFHP		non-UFHP				
Age Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0.4	11.7	10.0	11.2	10.6	10.7	10.6	12.0	12.2	12.6	11.1	11.0	11.1	11.0	11.1	11.0
0-4	11.5	10.9	11.2	10.6	10.7	10.6	12.0	13.3	12.6	11.1	11.0	11.1	11.2	11.1	11.2
5-9	11.0	10.4	10.7	12.4	11.0	11.7	11.9	13.1	12.5	11.7	10.9	11.3	10.4	11.0	10.7
10-14	11.9	12.6	12.3	12.9	12.8	12.9	13.9	14.0	13.9	12.6	12.8	12.7	10.8	13.1	12.0
15-19	10.8	14.8	12.8	10.1	12.4	11.2	10.8	12.0	11.4	10.5	13.5	12.0	10.7	13.9	12.3
20-24	9.2	12.0 9.7	10.6	7.7 7.7	11.2	9.5 8.4	8.8	9.6	9.2	8.5	11.4	10.0 8.6	8.7	11.8 8.3	10.3
25-29	8.2		9.0		9.1		6.9	8.0	7.5	7.9	9.3		9.6		8.9
30-34	8.6	6.8	7.7	7.8	8.3	8.0	7.4	7.6	7.5	8.1	7.5	7.8	8.7	8.0	8.4
35-39	7.4	6.0	6.7	7.6	6.2	6.9	5.5	5.4	5.5	7.3	6.1	6.7	8.2	6.8	7.5
40-44	5.5	4.9	5.2	7.6	4.6	6.1	5.5	4.9	5.2	6.4	4.8	5.6	6.3	4.5	5.4
45-49	4.4	4.0	4.2	4.4	3.9	4.2	4.8	3.6	4.2	4.5	3.9	4.2	4.9	3.7	4.3
50-54	3.7	2.0	2.9	3.2	2.6	2.9	3.3	2.4	2.9	3.5	2.3	2.9	3.7	1.9	2.8
55-59	2.0	1.5	1.8	2.0	2.2	2.1	2.0	1.9	1.9	2.0	1.9	1.9	1.8	2.0	1.9
60-64	2.5	1.5	2.0	2.1	1.9	2.0	2.5	1.1	1.8	2.3	1.6	2.0	1.8	1.4	1.6
65-69	1.1	0.8	0.9	1.5	0.9	1.2	1.3	1.0	1.2	1.3	0.9	1.1	0.9	0.8	0.9
70-74	1.3	0.9	1.1	1.1	1.2	1.1	1.6	0.8	1.2	1.2	1.0	1.1	1.4	0.8	1.1
75-79	0.4	0.2	0.3	0.5	0.3	0.4	0.8	0.5	0.7	0.5	0.3	0.4	0.3	0.4	0.4
80+	0.5	0.8	0.7	0.7	0.5	0.6	0.8	0.8	0.8	0.6	0.7	0.7	0.5	0.4	0.4
Missing/DK	0.0	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	6,072	6,159	12,231	5,701	5,801	11,502	1,197	1,153	2,350	12,969	13,114	26,083	4,125	4,287	8,412

Table 2.1B Population pyramid

Percent distribution of the de facto household population by five-year age group, according to sex, by city type and UFHP and non-UFHP areas

		City			District			Thana		Т	otal UFH	P		Non-UFF	ΙP
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Age Group															
0-4	5.7	5.5	11.2	5.3	5.4	10.6	6.1	6.5	12.6	5.5	5.5	11.1	5.5	5.6	11.2
5-9	5.4	5.3	10.7	6.1	5.6	11.7	6.1	6.4	12.5	5.8	5.5	11.3	5.1	5.6	10.7
10-14	5.9	6.3	12.3	6.4	6.5	12.9	7.1	6.9	13.9	6.2	6.4	12.7	5.3	6.7	12.0
15-19	5.4	7.4	12.8	5.0	6.3	11.2	5.5	5.9	11.4	5.2	6.8	12.0	5.2	7.1	12.3
20-24	4.6	6.0	10.6	3.8	5.6	9.5	4.5	4.7	9.2	4.2	5.7	10.0	4.3	6.0	10.3
25-29	4.1	4.9	9.0	3.8	4.6	8.4	3.5	3.9	7.5	3.9	4.7	8.6	4.7	4.2	8.9
30-34	4.3	3.4	7.7	3.8	4.2	8.0	3.8	3.7	7.5	4.0	3.8	7.8	4.3	4.1	8.4
35-39	3.7	3.0	6.7	3.8	3.1	6.9	2.8	2.7	5.5	3.6	3.0	6.7	4.0	3.5	7.5
40-44	2.7	2.5	5.2	3.8	2.3	6.1	2.8	2.4	5.2	3.2	2.4	5.6	3.1	2.3	5.4
45-49	2.2	2.0	4.2	2.2	2.0	4.2	2.4	1.8	4.2	2.2	2.0	4.2	2.4	1.9	4.3
50-54	1.8	1.0	2.9	1.6	1.3	2.9	1.7	1.2	2.9	1.7	1.2	2.9	1.8	1.0	2.8
55-59	1.0	0.8	1.8	1.0	1.1	2.1	1.0	0.9	1.9	1.0	0.9	1.9	0.9	1.0	1.9
60-64	1.3	0.7	2.0	1.0	1.0	2.0	1.3	0.6	1.8	1.1	0.8	2.0	0.9	0.7	1.6
65-69	0.5	0.4	0.9	0.8	0.4	1.2	0.7	0.5	1.2	0.6	0.4	1.1	0.4	0.4	0.9
70-74	0.6	0.4	1.1	0.5	0.6	1.1	0.8	0.4	1.2	0.6	0.5	1.1	0.7	0.4	1.1
75-79	0.2	0.1	0.3	0.3	0.1	0.4	0.4	0.3	0.7	0.2	0.1	0.4	0.1	0.2	0.4
80 +	0.3	0.4	0.7	0.3	0.3	0.6	0.4	0.4	0.8	0.3	0.3	0.7	0.2	0.2	0.4
Missing /DK	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1
Total	49.6	50.4	100	49.6	50.4	100	50.9	49.1	100	49.7	50.3	100	51	51.0	100
Number	6,072	6,159	12,231	5,701	5,801	11,502	1,197	1,153	2,350	12,969	13,114	26,083	4,287	4,287	8,412

#### 2.2 Household Composition

Table 2.2 presents information on the sex of household heads and the number of usual members in households by city type and UFHP and non-UFHP areas. Most households – approximately 90 percent – were headed by males. This proportion was slightly lower in City Corporations than in the other two city types. The mean household size (usual members) was similar across the city types and UFHP and non-UFHP areas.

Table 2.2 Household composition

Percent distribution of households by sex of head of household and household size, by city type and UFHP/non-UFHP area

	Residence							
Characteristic	City	District	Thana	UFHP	Non-			
					UFHP			
Sex of head of household								
Male	87.6	89.9	90.3	88.9	89.6			
Female	12.4	10.1	9.7	11.1	10.4			
Total	100.0	100.0	100.0	100.0	100.0			
Number of usual members								
1	1.0	1.2	1.1	1.1	1.1			
2	7.5	7.7	6.8	7.5	8.8			
3	16.2	14.9	16.1	15.6	16.7			
4	22.7	23.7	18.2	22.8	20.9			
5	20.0	20.3	19.0	20.1	20.1			
6	13.0	12.2	14.1	12.8	14.6			
7	8.4	8.6	10.5	8.7	7.8			
8	5.1	3.7	6.7	4.6	4.9			
9+	6.0	7.6	7.4	6.8	4.9			
Total	100.0	100.0	100.0	100.0	100.0			
Mean size	5.0	5.0	5.2	5.0	4.9			

Note: Table is based on de jure members, i.e., usual residents.

#### 2.3 Housing Characteristics

Of the three city types, households in Thana Municipalities tended to be of lower socioeconomic status and to have less access to safe water and better sanitary facilities. Only 12 percent of households in Thana Municipalities had piped water inside their dwelling as their source of drinking water (Table 2.3). This was not dissimilar to District Municipalities, where only 14 percent of households had access to piped drinking water in their dwellings. In City Corporations, however, over 40 percent of households had piped water inside the dwelling and an additional 15 percent had piped drinking water outside of the dwelling. The most common source of drinking water, both in District and Thana Municipalities was a tubewell, the source of drinking water for over 80 percent of these households. Boiling drinking water was common only in City Corporations, where nearly one-third of households boiled their drinking water. Only 6 percent and 2 percent of households in District Municipalities and Thana Municipalities, respectively, boiled their drinking water.

Modern toilets were most common among households in City Corporations (52 percent) but just under one-third of households in Thana Municipalities had modern toilets. Few households – 1.7 percent of the UFHP population – had no toilet facilities.

#### 2.4 Housing Characteristics and Possession of Durable Goods

Table 2.4 presents data on housing characteristics and possession of consumer durables. Households in City Corporations were more likely to own land and a variety of consumer durables. Nearly 93 percent of households in UFHP city corporation areas had electricity, as compared with just under two-thirds of UFHP households in Thana Municipalities. The proportion of households with radios was more even – 44.2 percent of households in City Corporations, 42.1 percent of households in District Municipalities, and 34.0 percent of households in Thana Municipalities. A higher proportion of UFHP households – 52.4 percent – had televisions than had radios (42.3 percent). More than half of UFHP households had tin roofs – 76.1 percent in District Municipalities, 66.2 percent in Thana Municipalities, and 55.7 percent in City Corporations. Approximately two-thirds of households in Thana Municipalities had earth or bamboo floors.

The distribution of land ownership was roughly similar across the different city types, but slightly more common in Thana Municipalities. Just under 40 percent of households in Thana Municipalities owned land, as compared with 30.4 percent of households in City Corporations and 29.4 percent of households in District Municipalities.

Households in non-UFHP areas tended to have slightly higher indicators of socioeconomic status and access to adequate water and sanitation than even households in UFHP City Corporations. A higher proportion of non-UFHP households (44.8 percent) had piped drinking water in their dwelling than UFHP households in City Corporations (42.3 percent). Non-UFHP households were more likely to have watches/clocks (82.2 versus 81.8 percent), cots/beds (92.8 versus 92.4 percent), bicycles (13.6 versus 11.0 percent), finished or tin roof (95.4 versus 88.2 percent), and brick walls (63.3 versus 62.0 percent) than UFHP households in City Corporations. This latter observation – that households in non-UFHP areas tended to be better off even than those in UFHP City Corporations – may also be a reflection of the aim of the project to serve "underserved" and perhaps less affluent populations, or at least those with less access to a variety of services and amenities.

Table 2.3 Housing characteristics

Percent distribution of households by background characteristics, according to residence, by city type and UFHP/non-UFHP area

		Residence	Т	otal	
Background characteristic	City	District	Thana	UFHP	Non-UFHP
	<b>,</b>				
Water source for diswashing					
Piped inside dwelling	49.2	22.6	14.0	34.2	50.8
Piped outside dwelling	13.0	2.4	0.2	7.1	6.1
Tube-well/Deep Tube-well	27.6	67.2	56.5	47.8	34.1
Surface Well/Other Well	1.2	0.3	0.7	0.7	0.6
Pond/Tank/Lake	7.9	6.9	28.6	9.3	8.3
River/Stream	1.1	0.7	0.0	0.8	0.1
Rainwater	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
Drinking water source					
Piped inside dwelling	42.3	14.1	12.1	27.1	44.8
Piped outside dwelling	15.4	2.7	3.3	8.6	6.6
Tube-well/Deep Tube-well	41.8	82.3	82.7	63.5	48.4
Surface Well/Other Well	0.2	0.2	0.0	0.2	0.0
Pond/Tank/Lake	0.3	0.0	1.0	0.2	0.1
River/Stream	0.1	0.6	0.0	0.3	0.0
Rainwater	0.0	0.0	0.8	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0
Boil drinking water					
Yes	31.7	6.1	2.2	17.7	30.9
No	68.2	93.9	97.7	82.3	69.1
Total	100.0	100.0	100.0	100.0	100.0
Type of Toilet Facility					
Septic Tank/ Modern Toilet	52.3	41.2	32.1	45.6	44.1
Water Sealed/Slab Latrine	14.3	23.3	20.5	18.8	19.8
Pit Latrine	3.9	19.0	18.7	11.9	8.0
Open Latrine	27.7	13.3	22.7	20.8	24.0
Hanging Latrine	1.2	0.7	0.6	0.9	2.3
No facility/Bush/Field	0.4	2.4	5.2	1.7	1.3
Other	0.3	0.2	0.2	0.2	0.4
Total	100.0	100.0	100.0	100.0	100.0
Share facility with other households					
Yes	59.9	51.5	59.3	56.1	62.6
No	40.0	48.5	40.7	43.8	37.2
Missing	0.2	0.0	0.0	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0
Number	2,399	2,302	455	5,156	1,708

Table 2.4 Housing characteristics

Percent distribution of households by background characteristics, by city type and UFHP/non-UFHP area

	Residence							
Background Characteristics	City	District	Thana	Total UFHP	Non-UFHP			
Electricity								
Yes	92.5	78.1	65.3	83.7	87.1			
No	7.5	21.9	34.7	16.3	12.9			
Almirah (wardrobe)								
Yes	52.5	44.8	35.3	47.6	47.7			
No	47.4	55.2	64.7	52.4	52.3			
Table/Chair								
Yes	64.6	76.1	65.0	69.8	64.4			
No	35.4	23.9	35.0	30.2	35.6			
Bench								
Yes	6.7	14.0	10.8	10.3	7.1			
No	93.3	85.8	89.1	89.6	92.9			
Watch/Clock								
Yes	81.8	78.3	68.1	79.0	82.2			
No	18.1	21.6	31.6	20.8	17.8			
Cot/Bed								
Yes	92.4	95.2	87.1	93.2	92.8			
No	7.4	4.8	12.9	6.7	7.2			
Radio								
Yes	44.2	42.1	34.0	42.3	42.7			
No	55.8	57.9	66.0	57.6	57.1			
Television								
Yes	57.6	50.9	32.7	52.4	55.8			
No	42.4	49.1	67.3	47.6	44.2			
Bicycle								
Yes	11.0	24.0	15.8	17.2	13.6			
No	89.0	76.0	84.2	82.7	86.3			
Motorcycle								
Yes	2.9	5.7	1.4	4.0	2.9			
No	97.1	94.3 0.0	98.6	96.0	97.0			
Sewing Machine								
Yes	16.4	16.0	9.1	15.6	15.7			
No	83.6	84.0	90.7	84.4	84.2			
Telephone								
Yes	13.7	8.7	3.0	10.5	12.0			
No	86.2	91.2	97.0	89.4	87.9			

Table 2.4 Housing characteristics

Percent distribution of households by background characteristics, by city type and UFHP/non-UFHP area

	Residence						
Background Characteristics	City	District	Thana	Total UFHP	Non-UFHP		
Main material of roof							
Natural roof (bamboo/thatch)	9.3	1.7	9.9	6.0	2.2		
Tin roof	55.7	76.1	66.2	65.8	60.1		
Finished roof (Pukka)	32.4	21.1	16.3	25.9	35.3		
Other	2.5	0.8	7.6	2.2	2.4		
Total	100.0	100.0	100.0	100.0	100.0		
Main material of walls							
Natural walls	31.8	31.2	46.0	32.8	26.1		
Rudimentary walls	0.1	1.3	1.3	0.7	0.9		
Brick/Cement	62.0	48.4	32.9	53.3	63.3		
Tin	5.0	18.7	18.6	12.3	9.1		
Other	1.1	0.4	1.2	0.8	0.5		
Total	100.0	100.0	100.0	100.0	100.0		
Main material of floor							
Earth/Bamboo (Katcha)	29.1	48.3	66.3	41.0	32.1		
Wood	1.4	1.2	0.0	1.2	2.3		
Cement/Concrete	69.4	50.5	33.7	57.8	65.5		
Other	0.1	0.0	0.0	0.0	0.1		
Total	100.0	100.0	100.0	100.0	100.0		
Own homestead							
Yes	83.2	89.3	90.4	86.5	87.5		
No	16.7	10.7	9.6	13.4	12.5		
Total	100.0	100.0	100.0	100.0	100.0		
Amount of land owned							
No land	63.5	66.4	59.9	64.5	66.5		
< 50 decimals	03.5 11.8	8.5	13.1	10.5	10.1		
< 50 decimals 50-99 decimals	5.4	8.5 5.0	7.2	5.4	10.1 5.4		
1.00 - 1.99 acres	5.4 5.5	5.0 6.0	7.2 7.9	5.4 5.9	3.4 4.9		
2.00 - 4.99 acres	5.3 5.1	5.9	5.3	5.5	4.9 4.9		
2.00 - 4.99 acres 5+ acres	2.4	4.0	3.4	3.3	2.8		
DK/ missing	6.1	4.0	3.3	5.0	5.2		
Total	100.0	100.0	100.0	100.0	100.0		
Number	2,399	2,302	455	5,156	1,708		

### 2.5 Socioeconomic Status

Women and households in the 2001 UFHP Evaluation Survey have been categorized into different socioeconomic status levels using an index of household assets. The use of asset information is utilized here in the absence of information on household expenditures and household income. Previous work has demonstrated the effectiveness of such measures of socioeconomic status relative to alternative income and expenditure groupings, particularly when faced with difficulties of imputing household production of consumption goods in agrarian societies.<sup>2</sup>

The main assets for which information was collected in the survey include household ownership of items such as beds, radios, televisions, chairs/tables, almirahs, watches/clocks, and bicycles as well as presence of electricity, type of water supply, type of toilet, and materials of dwelling roofs, walls and floors. The index is constructed using the method of principal components, which assigns each asset a factor score. The total factor score for a household is the sum of the factor scores for each asset owned by the household. Households are then categorized into quintiles based on their total asset score.

This method is used to overcome the absence of other measures of household income and wealth and the problems of aggregating different forms of income, particularly the value of household agricultural production. The methodology has been applied to the 1996 Bangladesh Demographic and Health Survey (BDHS) by Gwatkin et al (2000).<sup>3</sup>

MEASURE *Evaluation* applied the same methodology to the 2001 BDHS. From these calculations, asset factor scores were calculated for rural areas and urban areas separately for each asset in the index. These factor scores were then applied to the household assets in the samples of both the 2001 UFHP Evaluation Survey and the 2001 RSDP Evaluation Survey. Such calculations could not be performed for the 1998 Baseline Survey since that survey collected information only on a very reduced number of household assets.

#### Basic Characteristics

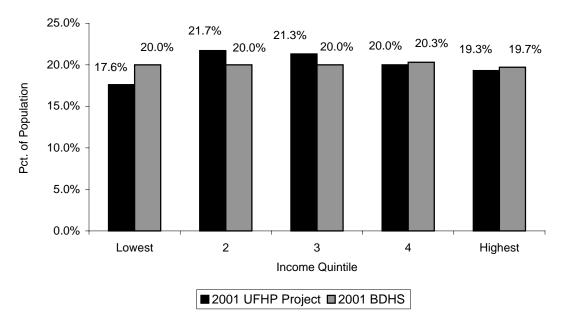
The urban population of the UFHP project areas appears little different in terms of socioeconomic status from the urban population in the country as a whole as seen in the 2001 BDHS (Figure 2.1). In both the 2001 UFHP Evaluation Survey and the urban sample of the 2001 BDHS, approximately 19 to 20 percent of both populations are categorized as being in the highest asset quintile. A greater proportion of the UFHP population is in the second lowest and middle asset quintiles than the Bangladesh population, but a smaller proportion of the UFHP population are in the very lowest asset quintile.

<sup>&</sup>lt;sup>2</sup> D. Filmer and L. Pritchett. 1998. "Estimating Wealth Effects without ExpenditureData – or Tears: An Application to Educational Enrollments in States of India, World Bank Policy Research Working Paper No. 1994.

Washington, D.C.: Development Economics Research Group (DECRG), The World Bank.

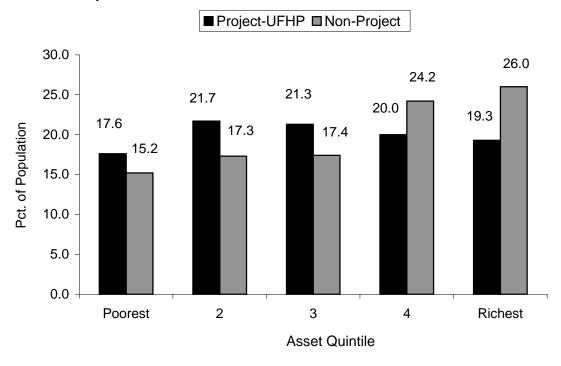
<sup>&</sup>lt;sup>3</sup> D. Gwatkin, S. Rustein, K.Johnson, R.Pande, and A.Wagstaff. 2000. Socio-economic Differences in Health, Nutrition and Population in Bangladesh, HNP/Poverty Thematic Group, Washington, D.C.: The World Bank.

Figure 2.1 Distribution of Urban Populations by Asset Quintiles, 2001 BDHS and 2001 UFHP Project Areas



The population of UFHP project areas is more evenly distributed across the asset quintiles than the population of non-UFHP areas (Figure 2.2). The differences, while indicating the UFHP areas are slightly poorer, are not large. A slightly higher proportion of the UFHP population (17.6 percent) are in the lowest asset quintile than the non-UFHP population (15.2 percent). Over half of the non-UFHP population is in the highest two asset quintiles but only 39.3 percent of UFHP population are.

Figure 2.2 Distribution of UFHP Project and Non-Project Populations by Asset Quintiles, 2001 UFHP Evaluation Survey



The populations of city corporations tend to have higher socioeconomic status than those of district municipalities, which in turn have higher socioeconomic status than those of than amunicipalities (Table 2.5). Just over 26 percent of the city corporation population are in the highest asset quintile, as compared with 14.6 percent of the district municipality population and 7.4 percent of the than amunicipality population.

Table 2.5 Socioeconomic Status	
Percent distribution of households by quintile and city type, UFHP an non-UFHP areas	d

	City 7			
Asset	City	District	Thana	
Quintile	Corp.	Municip	Municip.	Non-Project
Lowest	12.0	20.3	33.4	15.2
2	17.9	24.0	30.4	17.3
3	23.9	20.1	14.3	17.4
4	20.1	21.1	14.5	24.2
Highest	26.2	14.6	7.4	26.0
Total	100.0	100.0	100.0	100.0

### CHAPTER 3. WOMEN'S CHARACTERISTICS AND STATUS

The chapter provides a description of the situation of women of reproductive age, covered with the 2001 UFHP Evaluation survey. Percent distributions of various demographic and socioeconomic background characteristics of respondents are shown and discussed for the full sample of (UFHP) project areas vis-à-vis the full sample of non-project areas. The information is useful for understanding the context in which the survey findings were obtained as well as for interpretation of the findings.

### 3.1 General Characteristics

Table 3.1 contains the distributions of respondents by general background characteristics, such as their age, residence, marital status, religion, and the education and literacy levels. In the UFHP areas, slightly over 45 percent of ever-married women lived in cities (or in city corporation areas) and almost an equal proportion in district towns (District Municipalities). Only 9 percent were from thana towns (or Thana Municipalities). About 9 out of every 10 ever-married women were Muslim, with most of the rest being Hindu.

There were relatively fewer respondents under age 20 years than in the age range of 20 to 39 years, in the survey. This is because only those women who had married were interviewed, and many women do not marry by age 20 in Bangladesh, in particular in the urban areas. Beginning with the 30 to 34 age cohort, the proportion of respondents gradually dropped with age. Thus in the UFHP areas, 54 percent of ever-married women interviewed in the reproductive age range (10 to 49 years) were age 20 to 34 years, 33 percent age 35 years or above, and 13 percent age 10 to 19 years. About 9 out of every 10 ever-married women were currently married, about 5 percent widowed and the rest, fewer than 5 percent divorced, separated or deserted. Most currently married women were reportedly staying with their husbands, making up 84 percent of all ever married women in the sample. Most ever-married women reported to have married only once, with only 5 percent saying they had more than one marriage. The rate for multiple marriages might be an underestimate; plausibly, some women with multiple marriages were shy to tell the interviewer that they were married more than once.

Many surveyed women still were uneducated or had low levels of education. Over one-third (36 percent) of ever-married women in the UFHP areas had never attended school, while about a quarter (24 percent) had attended only a primary school. In contrast, only over a quarter (28 percent) were found to have had some secondary education and only 12.5 percent a higher secondary or a college/university education. As a result, only 48 percent of women could be listed as those who were able to read and write a letter easily, compared to 43 percent who were not at all able to.

Between the project and non-project areas, there were little or no variations in the compositions of evermarried women by age, marital status, education and religion.

Table 3.1 Background characteristics of respondents

Percent distribution of women by selected background characteristics, by UFHP and non-UFHP areas

Age 10-14 15-19 20-24	Percent of Women  1.3 12.0	Weighted 69	of Women Unweighted	Percent of Women	Number Weighted	of Women Unweighted
Age 10-14 15-19 20-24	1.3 12.0	69			Weighted	Unweighted
10-14 15-19 20-24	12.0					
10-14 15-19 20-24	12.0					
15-19 20-24	12.0					
20-24			77	0.3	6	6
	10 1	647	654	12.7	226	226
	18.1	982	973	18.5	330	330
25-29	18.4	998	961	17.3	308	308
30-34	17.2	932	953	18.2	324	324
35-39	13.4	726	728	14.8	264	264
40-44	10.7	580	607	10.0	178	178
45-49	8.9	481	461	8.1	144	144
Residence						
City	46.3	2,505	1,964	0.0	0	0
District	45.1	2,444	2,238	0.0	0	0
Thana	8.6	465	1,212	0.0	0	0
Current Marital status						
Married	91.0	4,925	4,951	90.4	1,610	1,610
Separated	1.4	74	67	1.1	20	20
Deserted	1.6	84	82	2.6	46	46
Divorced	1.4	76	68	1.4	25	25
Widowed	4.7	255	246	4.4	79	79
Husband staying with her						
Yes	84.7	4,585	4,620	86.0	1,530	1,530
No	6.2	337	328	4.5	80	80
Missing	9.1	492	466	9.6	170	170
Married once/ more than once						
Once	94.2	5,098	5,097	94.8	1,688	1,688
More than once	5.4	294	298	5.0	89	89
Missing	0.4	22	19	0.2	3	3

Table 3.1 Background characteristics of respondents

Percent distribution of women by selected background characteristics, by UFHP and non-UFHP areas

	UFHP			Non-UFHP			
	Percent of	Number	of Women	Percent of	Number of Women		
Background Characteristics	Women	Weighted	Unweighted	Women	Weighted	Unweighted	
Highest Level of School							
None	35.5	1,920	1,974	33.5	597	597	
Primary	23.6	1,280	1,271	25.7	457	457	
Secondary	28.4	1,537	1,516	28.3	504	504	
Higher Secondary	8.1	437	437	8.5	151	151	
College/University	4.4	240	216	4.0	71	71	
Read/Write letter				10.5		0=0	
Easily	47.7	2,580	2,524	49.3	878	878	
With difficulty	9.3	506	507	8.2	146	146	
Not at all	42.7	2,314	2,369	42.2	751	751	
Missing	0.3	15	14	0.3	5	5	
Religion							
Islam	90.7	4,912	4,967	92.0	1,637	1,637	
Hinduism Buddhism	8.6	463	411	7.4	131	131	
Christianity	0.3	17	13	0.2	3	3	
Christianity	0.4	21	23	0.5	9	9	
Number	100.0	5,414	5,414	100.0	1,780	1,780	

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

### 3.2 Differentials in Education

Differentials in education of surveyed women by selected background characteristics are given in Table 3.2. There was an inverse relationship between education and age of the women. Older women had less education than younger women. This pattern is expected with the education of women rising over time. While nearly 50 percent of women age 45-49 years had never attended school, the proportion dropped with every successive younger age cohort, reaching about 25 percent for women in the two youngest age groups, 15-19 and 10-14. In contrast, the percentage having a primary education rose with every successive younger age cohort from only 21 percent among women in the oldest age group to 40 percent among those in the youngest age group. Similar pattern of differentials by age was evident in higher levels of education among women in the relevant age groups, excluding those who were not yet past the age to receive a given level of education. The overall measure of education, the median years of schooling, peaked in the 25-34 year age group, with an average woman having had over 7 years of schooling. The median of schooling years was lower for older women because they had less opportunities to receive education than women born after them did. The lower median for younger women is due to the fact that many of them were below the age to have competed their schooling.

In the UFHP areas, women had less education in thana municipalities than in district-towns/ cities. Forty-six percent of respondents in thana municipalities reported to have never attended school, compared to 33 percent of those in district towns and 36 percent in cities. For the median of schooling years, the differences ran from 5 years for thana towns to 7 years for district-towns/cities. In contrast, 13 percent of respondents had a higher secondary or a college/university education in district-towns/ cities, compared to only 6 percent for thana towns. There were virtually no variations in education of women between the project and non-project areas.

Table 3.2 Educational attainment by background characteristics

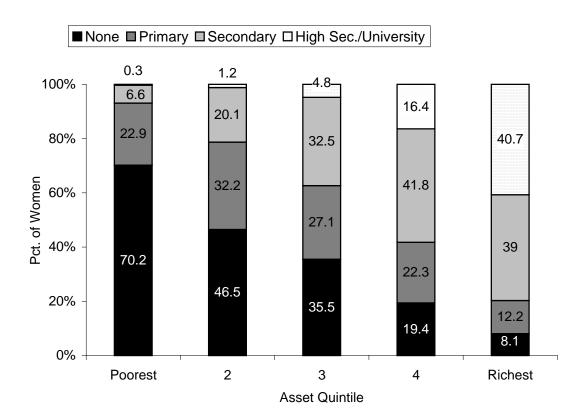
Percent distribution of women by highest level of schooling attended, and median number of years of schooling, according to

background characteristics, UFHP areas

		Highest	Total	Median	Number			
Background	No			Higher	College/		years of	of
characteristic	education	Primary	Secondary	Secondary	University		schooling	Women
Age (UFHP only)								
10-14	26.1	39.6	34.4	0.0	0.0	100.0	4.5	69
15-19	24.4	32.0	41.0	2.4	0.2	100.0	5.2	647
20-24	28.3	24.8	32.8	10.6	3.5	100.0	6.6	982
25-29	31.6	23.7	28.8	9.5	6.4	100.0	7.4	998
30-34	35.7	21.8	26.4	10.1	6.0	100.0	7.4	932
35-39	41.4	20.2	25.5	7.6	5.3	100.0	7.2	726
40-44	48.1	20.7	21.8	6.0	3.6	100.0	6.7	580
45-49	49.8	20.2	16.7	7.9	5.3	100.0	6.6	481
Residence								
City	36.1	24.3	26.5	8.1	5.0	100.0	6.6	2,505
District	32.8	23.0	31.1	8.7	4.5	100.0	6.9	2,444
Thana	46.3	23.6	24.2	4.5	1.3	100.0	5.0	465
Total UFHP	35.5	23.6	28.4	8.1	4.4	100.0	6.6	5,414
Non-UFHP	33.5	25.7	28.3	8.5	4.0	100.0	6.3	1,780

Educational attainment is clearly associated with socioeconomic status. As shown in Figure 3.1, approximately 70 percent of women in UFHP project areas in the lowest asset quintile received no formal education, as compared with only 8 percent of women in the highest asset quintile. Approximately 40 percent of women in the highest asset quintile have had higher secondary or university education, but less than one percent of women in the lowest asset quintile have.

Figure 3.1 Distribution of Women's Education Levels by Asset Quintiles, UFHP Project Areas



A similar correlation between socioeconomic status and education is evident for husbands as well (Figure 3.2). Husbands in the highest asset quintile were almost twice as likely to receive secondary education as husbands in the lowest asset quintile. Nearly two-thirds of husbands in the highest asset quintile received higher secondary/university education as compared with only one percent of husbands in the lowest asset quintile.

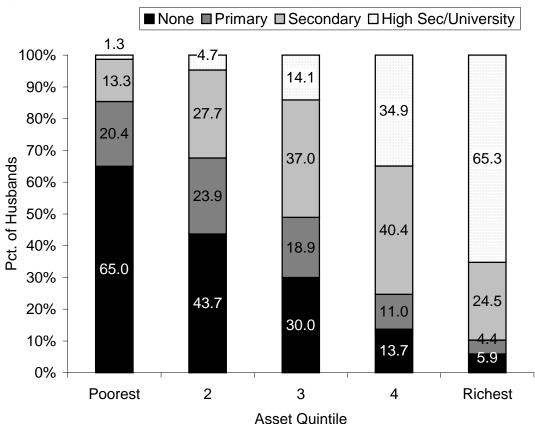


Figure 3.2 Distribution of Husband's Education Levels by Asset Quintiles, UFHP Project Areas

### 3.3 Exposure to Mass Media

In assessing the extent of exposure to mass media of women covered with the survey, respondents were asked whether they usually read a newspaper or magazine, listened to radio, or watched television, and if they did, how often did they read/listen/watch. Table 3.3 presents the percentage of respondents exposed to each of these media. Television was the most popular of the three mass media examined in the survey. Eight out of every 10 respondents reported that they usually watched television, with nearly 60 percent watching it everyday and an additional 20 percent watching at least once a week. Radio was the next most popular medium, followed by newspaper/magazine. Radio was listened to by 41 percent of women usually, 15 percent everyday and about 20 percent at least once a week, while newspaper/magazine was read by 31 percent usually, but with only 9 percent reading it everyday and only 14 percent at least once a week.

Differentials in exposure of women to mass media by selected background characteristics are shown in Table 3.4, in terms of percentages of women who read a newspaper/magazine at least once a week, watch television at least once a week and listen to radio at least once a week. Only about 10 percent of women had exposure to all the three mass media at least once a week, that is, had read newspaper/magazine, listened to radio, and watched television, at least once a week.

The percentage of women having exposures to all the three media at least once a week was slightly lower in thana towns than in district-towns/cities, while there were almost no variations in the percentage of women listening to radio at least once a week by the type of urban centers. There were only small variations in exposures of women to newspapers/magazines and television, between district towns and cities. But women had much less exposures to those media in thana towns. In the thana towns, only 12 percent of women reported

to have read, at least once a week, newspapers/magazines and only 58 percent to have watched television, compared to 23-25 and 79-81 percent, respectively, of those in district-towns/cities.

Exposures to television and radio were generally greater among younger than older women. Thus, 80-83 percent of women in the 15 to 24 age group were found watching television at least once a week, compared to 69 percent of those in the oldest age group, 45 to 49, while for the percentage listening to radio, the variations ranged from 29 percent in the oldest age group to 48 percent for the youngest age group. However, women below age 20 appeared to have some restrictions on their watching of television, and it was more so for those who were younger.

Contrary to the differentials for television and radio, women ages 25 to 39 were more likely to read newspaper/magazines than younger women. In consequence, the percentage of women having exposures to all the three media was found highest among women in the 25 to 39 year age group, while remaining lower among both the older and the younger women.

Exposure to the mass media was closely associated with education. Educated or more educated women had the greater exposure than did the uneducated or less educated women. For example, only 28 percent of women having no education reported to have listened to radio at least once a week, compared to 36 percent of those who had at least some primary education and 42 percent of those who had a College/University education. The variations were even more striking for newspapers/magazines and television.

Seventeen percent of women had no exposures to any of the three mass media—newspapers/magazines, radio and television. Proportions of women having no exposures to the mass media were higher for women in thana towns than in district-towns and cities, higher for women in the youngest and oldest age groups, and higher for uneducated and less educated women. There is no difference between UFHP and non-UFHP areas with regards to the exposure of women to mass media.

<u>Table 3.3 Access to mass media</u>

Percent distribution of women by selected background characteristics by UFHP and non-UFHP areas

	UF	ΉP	Non-UFHP		
Background Characteristics	% of Women	Weighted Number	% of Women	Weighted Number	
Usually reads paper or magazine Yes No Missing	30.8 68.9 0.2	1,670 3,731 13	32.4 67.4 0.3	576 1,199 5	
How often reads newspaper Does not read/cannot read Every day At least once a week Less than once a week	69.2 9.3 13.7 7.9	3,744 501 740 429	67.6 10.4 12.8 9.2	1,204 185 228 163	
Usually listens to radio Yes No	41.4 58.6	2,240 3,174	41.0 59.0	730 1,050	
How often listens to radio Does not listen Every day At least once a week Less than once a week.	58.6 15.0 19.5 6.9	3,174 812 1,055 374	59.0 15.6 17.8 7.7	1,050 277 316 137	
Watches TV Yes No	80.8 19.2	4,375 1,039	83.1 16.9	1,479 301	
How often watches TV Does not watch Every day At least once a week Less than once a week	19.2 56.6 21.1 3.1	1,039 3,065 1,141 169	16.9 59.3 21.1 2.7	301 1,056 375 48	

Table 3.4 Exposure to mass media

Percentage of women who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, UFHP areas

		Reads a	Watches	Listens to the		
Background	No mass	newspaper	television	radio at least	All three	Number
characteristic	media	weekly	weekly	once a week	media	
Age						
10-14	18.3	11.0	67.5	48.4	4.9	69
15-19	14.2	12.6	79.6	43.9	8.1	647
20-24	12.7	22.4	82.5	36.5	9.9	982
25-29	14.5	26.0	79.8	35.8	10.8	998
30-34	17.6	27.6	77.7	31.3	11.1	932
35-39	17.7	26.0	77.7	30.6	9.9	726
40-44	22.9	19.4	72.8	31.2	7.7	580
45-49	26.4	24.0	69.2	28.8	7.1	481
Residence						
City	14.3	24.9	80.8	35.2	9.2	2,505
District	16.7	22.9	78.8	33.6	10.1	2,444
Thana	34.6	12.1	57.6	35.3	7.7	465
Education						
No education	31.1	0.2	64.4	28.2	0.1	1,920
Primary	17.2	7.8	77.2	36.0	3.4	1,280
Secondary	6.5	39.0	88.1	38.7	16.5	1,537
Higher Secondary	2.0	73.7	94.8	38.5	29.1	437
College/University	0.0	90.2	96.9	42.3	36.7	240
Total UFHP	17.1	22.9	77.7	34.5	9.5	5,414

### 3.4 Membership in NGOs

Shown in Table 3.5 is the percentage of women affiliated to an NGO (Non-governmental Organization), that is, to Grameen Bank, BRAC, BRDB, Mothers club, Proshika, ASHA, or any other such organization. It is possible that a woman may be affiliated with more than one NGO. Thus adding the percentages of respondents shown affiliated with specific NGOs, it is seen that at the most 28 percent of ever-married women in the reproductive age group in the UFHP areas were affiliated with NGOs by obtaining their membership. ASHA and BRAC emerged as the most popular NGOs having 7 and 5 percent of the women respectively as their members in UFHP areas. The proportions of women reporting membership with other NGOs were only about 2 percent or even fewer on individual NGO level. As in the case of general background characteristics, there were little or no variations in women's affiliation with NGOs, between project and non-project areas.

Table 3.5 Membership in NGOs

Percent distribution of women by selected background characteristics, by UFHP and non-UFHP area

	UF	HP	Non-UFHP		
	% of Women	Number	% of Women	Number	
Belongs to Grameen bank					
Yes	1.3	79	1.3	24	
No	98.7	5,333	98.7	1,756	
Belongs to BRAC					
Yes	5.3	289	4.6	82	
No	94.7	5,125	95.4	1,698	
Belongs to BRDP					
Yes	0.6	42	0.2	3	
No	99.4	5,371	99.8	1,777	
Mother's Club					
Yes	0.1	5	0.2	3	
No	99.8	5,405	99.8	1,777	
Proshika					
Yes	2.2	143	2.4	42	
No	97.8	5,268	97.6	1,738	
Asha					
Yes	6.9	399	4.6	81	
No	93.1	5,013	95.4	1,699	
Belongs to other organization					
Yes	11.8	643	11.7	208	
No	88.2	4,770	88.3	1,572	
Belongs to any organization					
Yes	23.7	1,284	20.9	372	
No	76.3	4,130	79.1	1,407	

# 3.5 Proximity to Health Care Facilities

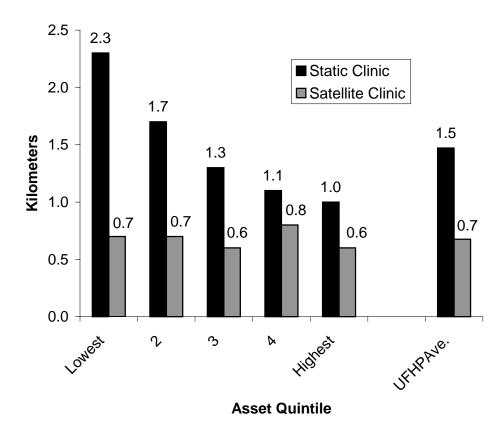
Overall, women in UFHP areas are 1.5 kilometers and 0.7 kilometers from UFHP static and satellite clinics respectively, though there is substantial variability in proximity to static clinics for women in different asset quintiles (Table 3.6, Figure 3.3). Women in the lowest asset quintile are 2.3 kilometers on average from the nearest UFHP static clinic, but women in the highest asset quintile are only 1.0 kilometers on average from the nearest UFHP static clinic. There is greater equity in access to UFHP satellite clinics, which are between 0.6 to 0.8 kilometers on average from UFHP populations of the different quintiles.

There is also considerable variability in access to UFHP static clinics by populations of different asset quintiles in the different city types. On average, women in than amunicipalities are 2.5 kilometers from the nearest static clinic, as compared with 1.1 kilometers and 1.7 kilometers for women in city corporations and district municipalities respectively. Within than amunicipalities, however, women in the lowest asset quintile are

considerably farther on average -4.2 kilometers – than women in the highest asset quintile -1.9 kilometers. The differences in the mean distances to the closest static clinic between the lowest and highest asset quintiles are less dramatic in city corporations (1.6 kilometers versus 0.8 kilometers) and in district municipalities (2.2 versus 1.2 kilometers).

Table 3.6 Distances to Facilities													
Mean distances to nearest UFHP Facility by City Type, UFHP Project Areas													
	City District Thana												
	Corp	orations	Munio	cipalities	Munio	cipalities	U	UFHP					
Quintile	Static	Satellite	Static	Satellite	Static	Satellite	Static	Satellite					
	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic					
Lowest	1.6	0.3	2.2	0.8	4.2	1.1	2.3	0.7					
2	1.2	0.3	2.0	1.0	2.0	1.0	1.7	0.7					
3	1.1	0.3	1.6	1.1	1.3	0.7	1.3	0.6					
4	1.0	0.3	1.2	1.3	1.5	0.8	1.1	0.8					
Highest	0.8	0.4	1.2	0.9	1.9	0.9	1.0	0.6					
UFHPAve.	1.1	0.3	1.7	1.0	2.5	0.9	1.5	0.7					

Figure 3.3 Proximity to UFHP Services, UFHP Project Areas



### **CHAPTER 4. FERTILITY**

Women were asked to provide information on all live births that they had had in their lifetimes. By examining dates of birth and the age of the mother at the time of births, age specific fertility rates can be calculated and then compared across time to establish trends.

## 4.1 Current Fertility

The total fertility rate is calculated as the total number of live births a woman would experience over her lifetime at currently observed fertility rates. Table 4.1 presents total fertility rates for women aged 15 to 49 years for the three years preceding the survey. For UFHP areas, the total fertility rate was 2.4 births per woman, slightly lower than in non-UFHP areas, where the total fertility rate was 2.5 births per woman. Total fertility was lowest in District Municipalities (2.3 births per woman), followed by City Corporations (2.4 births), and highest in Thana Municipalities (3.1 births). For both UFHP and non-UFHP areas, fertility was highest in the 20 to 24 age group.

Table 4.1 Current fertility

Age-specific and cumulative fertility rates and the crude birth rate for the three years preceding the survey, by urban-rural residence, by city type and UFHP/non-UFHP areas

		City Type			
Age group	City	District	Thana	UFHP	Non-UFHP
15-19	96	109	144	103	100
20-24	141	134	192	141	144
25-29	131	110	140	123	139
30-34	76	62	88	70	69
35-39	26	34	49	31	36
40-44	7	9	13	8	8
45-49	0	0	0	0	0
TFR15-49	2.39	2.30	3.13	2.39	2.48
TFR15-44	2.39	2.30	3.13	2.39	2.48
GFR	93.0	89.0	118.0	93.0	95.0
CBR	25.4	23.1	27.0	25.2	25.2

TFR: Total fertility rate for ages 15-49 expressed per woman

GFR: General fertility rate (births divided by the number of women age 15-44) expressed per 1,000 women

CBR: Crude birth rate expressed per 1,000 population

Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation.

Figure 4.1 shows that both UFHP and non-UFHP areas are very similar except for the age group of women 25-29 years old, where UFHP women had higher fertility rates.

Figure 4.1 Age-specific Fertility Rates by UFHP and Non-UFHP Areas

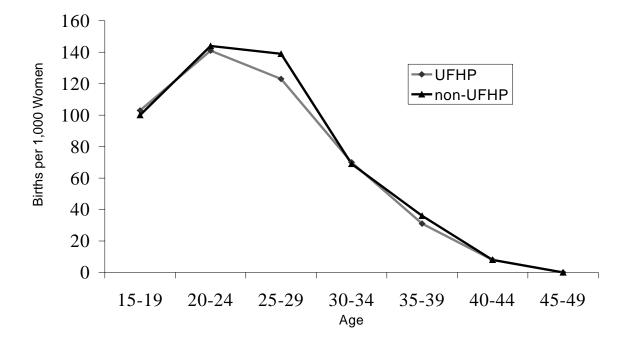
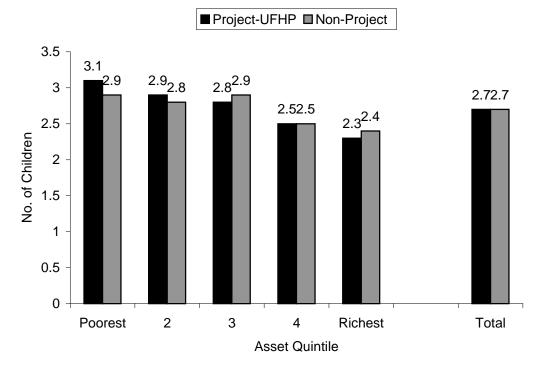


Table 4.2 shows differences in total fertility rates in the 3 year preceding the survey by residence. Overall, 5.75 of women in UFHP areas are currently pregnant. The percentage is highest in than areas of UFHP.

Table 4.2 Fertility by background characteristics  Total fertility rate for the three years preceding the survey and percentage currently pregnant, by background characteristics									
Background characteristic Total fertility rate Percentage current pregnant									
Residence City District Thana Total - UFHP	2.39 2.30 3.13	5.52 5.63 8.12 5.69							

The mean number of children ever born is negatively associated with socioeconomic status (Figure 4.2). UFHP project area women in the highest asset quintiles have on average approximately 0.8 fewer children than project area women in the lowest asset quintile – 2.3 children versus 3.1 children. The mean number of children by asset quintile is similar in UFHP and non-UFHP areas.

Figure 4.2 Mean Children Ever Born by Asset Quintile, Project and non-Project Areas



### **4.2 Fertility Trends**

Table 4.3 presents trends in total fertility rates over 5-year periods preceding the survey. In UFHP areas, the total fertility rate declined from 3.3 births per woman in the 5-10 year period preceding the survey – the period almost immediately prior to the project – to 2.5 births per woman in the 5 year period immediately preceding the survey, corresponding roughly to the period of the project. This represents an absolute decline of 0.8 births per woman. In non-UFHP areas, a decline was also observed, but the magnitude was smaller, only 0.5 births per woman, from 3.1 births to 2.6 births per woman. The decrease in fertility from the 5-10 year period preceding the survey to the most recent five-year period was roughly equal across all city types. Over the longer term – the 10-15 year period preceding the survey to the most recent 5-year period preceding the survey – the absolute decrease in fertility in UFHP areas was 1.5 births per woman. In non-UFHP areas, the decline was 1.3 births per woman. The largest decrease was in Thana Municipalities, where the total fertility rate declined from 5.6 births per woman to 3.4 births per woman. Figure 4.3 visually represents the trend in total fertility rates for all areas, total UFHP areas and non-UFHP areas.

### Table 4.3 Trends in Total Fertility Rates

Total Fertility Rates for the periods 1-60 months, 61-120 months and 121-180 months prior to the survey by city type and UFHP/non-UFHP areas

		Period Preceding the Survey										
	1-60 mos.	61-120 mos	121-180 mos	1-60 mont 61-120 i		ns versus months						
City Type				Pct. Change	Absolute	Pct. Change	Absolute					
					Change		Change					
City	2.4	3.1	4.1	-22%	-0.7	-40%	-1.7					
District	2.4	3.2	3.7	-25%	-0.8	-35%	-1.3					
Thana	3.4	4.3	5.6	-20%	-0.8	-39%	-2.2					
UFHP	2.5	3.3	4.0	-24%	-0.8	-38%	-1.5					
Non-UFHP	2.6	3.1	3.9	-17%	-0.5	-34%	-1.3					

Figure 4.3. Trends in Age-Specific Fertility Rates

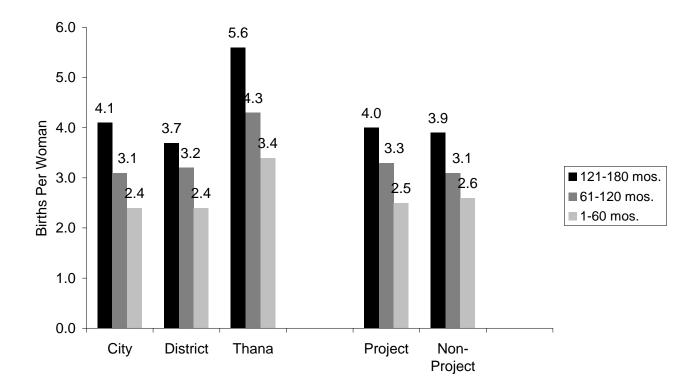


Table 4.4 shows that fertility declined for all age groups in three different city types and in UFHP/non-UFHP areas over the fifteen years preceding the survey. Again, fertility started at higher levels in Thana Municipalities than in the other two city types and declined more precipitously, but remained higher. Fertility in UFHP areas as a whole started slightly higher than in non-UFHP areas and by the time of the survey was slightly lower than in non-UFHP areas.

Table 4.4 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey by mother's age at the time of the birth, by city type and UFHP and non-UFHP area

Mother's age at birth	Number of	of years preceding the survey				
_	0-4	5-9	10-14			
City Corporations						
15-19	102	129	173			
20-24	148	188	227			
25-29	124	139	191			
30-34	73	96	126			
35-39	28	55	99			
40-44	10	18	,,,			
45-49	0	10	_			
43-49	0	_	_			
District Municipalities						
15-19	117	158	179			
20-24	141	187	223			
25-29	123	158	183			
30-34	60	83	111			
35-39	30	43	42			
40-44	7	9	44			
45-49		9	_			
43-49	0	_	_			
Thana Municipalities						
15-19	151	182	245			
20-24	197	222	296			
25-29	143	197	268			
30-34	95	134	184			
35-39	77	80	130			
40-44	13	41	130			
45-49	12	41	_			
45-49	12	_	_			
UFHP						
15-19	110	146	181			
20-24	149	190	231			
25-29	125	153	194			
30-34	68	94	124			
35-39	33	51	74			
40-44	9	15				
45-49	1	_	_			
.5 .7	•					
Non-UFHP						
15-19	110	140	166			
20-24	149	183	230			
25-29	133	138	181			
30-34	70	102	106			
35-39	40	43	87			
40-44	10	14	_			
45-49	0	_	_			
10 77	U	_				

Note: Age-specific fertility rates are per 1,000 women.

38

#### 4.3 Birth Intervals

A short interval between births is often associated with poorer maternal and infant health outcomes. It is recommended that births be spaced by at least 24 months. In UFHP areas, 85 percent of births came after the recommended interval (Table 4.5). Non-UFHP areas had a similar proportion, 84 percent of births. The proportion of births coming after the recommended two-year interval was relatively even across the different city types - 85.6 percent in City Corporations, 84.5 percent in District Municipalities, and 84.0 percent in Thana Municipalities. This proportion was slightly lower among women with no education (84.4 percent) relative to women with higher secondary education (87.3 percent) or college/university education (89.9 percent).

The median birth interval in terms of months was 42.9 months in UFHP areas and 44.3 months in non-UFHP areas. Again, the median birth interval was slightly higher in City Corporations (43.6 months) relative to District Municipalities (43.3 months) and Thana Municipalities (40.5 months). The median birth interval was similar for male and female births, increased with the age of the mother, and decreased with parity. The median birth interval for mothers aged 15 to 19 years was only 25.7 months, as compared with 41.7 months for women 20 to 29 years and 48.5 for women 30 to 39 years. Education plays a strong role in proper birth spacing. The median birth interval for women with no education (38.6 months) was almost a full year less than for women with a higher secondary education (50 months).

Table 4.5 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to background characteristics, UFHP/non-UFHP areas

Background characteristic		Months si	nce precedi	Total	Median number of months since preceding birth	Number of births		
8	7-17	18-23	24-35	36-47	48+		Freezens	
Age								
15-19	15.6	19.9	43.7	11.5	9.2	100.0	25.7	95
20-29	5.5	10.1	24.1	19.9	40.3	100.0	41.7	1,149
30-39	4.1	6.9	21.2	16.5	51.3	100.0	48.5	588
40-49	0.6	11.3	9.1	12.1	66.8	100.0	_	68
Birth order								
2-3	5.5	8.6	21.7	18.3	46.0	100.0	45.6	1,294
4-6	5.4	12.6	26.6	17.1	38.2	100.0	38.7	479
7+	4.9	9.3	32.9	20.5	32.3	100.0	37.4	125
Sex of preceding birth								
Male	6.3	9.7	22.7	17.8	43.5	100.0	43.2	980
Female	4.5	9.6	24.7	18.5	42.7	100.0	42.7	918
Survival of preceding birth								
Living	4.1	8.7	23.0	18.5	45.6	100.0	45.3	1,699
Dead	16.2	17.5	29.6	14.7	22.0	100.0	29.7	200
Residence								
City	5.0	9.4	23.6	18.1	43.9	100.0	43.6	849
District	5.7	9.8	23.4	17.8	43.4	100.0	43.3	840
Thana	6.2	9.8	25.2	19.9	38.9	100.0	40.5	210
Education								
No education	4.9	10.7	28.5	18.4	37.5	100.0	38.6	823
Primary	4.7	11.2	20.0	19.8	44.2	100.0	45.0	463
Secondary	6.6	7.7	20.5	17.2	48.0	100.0	46.8	470
Higher Secondary	7.5	5.2	13.6	17.5	56.2	100.0	50.0	95
College/University	4.8	5.3	26.6	8.4	56.0	100.0	_	48
Total - UFHP	5.4	9.6	23.7	18.1	43.1	100.0	42.9	1,899
Total Non-UFHP	5.7	10.4	21.3	17.9	44.7	100.0	44.3	647

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

### **CHAPTER 5. FAMILY PLANNING**

This chapter presents the findings concerning knowledge and use of family planning methods, and sources of family planning services/supplies, and levels and reasons of discontinuation of method-use. The information will be of practical use to policy and program staff in several ways in assessing performances and achievements of the program and in planning improvements.

# 5.1 Knowledge of Family Planning Methods

Knowledge of family planning methods in the 2001 Evaluation Survey was assessed in the same way as in the BDHS survey. Respondents were first asked to name the ways or methods by which a couple could delay or avoid pregnancy. After coding the method(s) a respondent could mention spontaneously, one after another the interviewer described each and every method that the respondent did not mention and asked whether the respondent had heard of it. Knowledge was assessed over eight modern methods and two traditional methods. The modern methods were oral pill, IUD, injection, condom, female and male sterilization, implants, and menstrual regulation (MR), while the traditional methods were periodic abstinence (safe period or rhythm method), and withdrawal.

Knowledge of family planning methods for currently married and ever married women are presented in Tables 5.1A and 5.1B, respectively. High knowledge by respondents of family planning methods was evident in the data. Virtually every respondent knew at least one modern method of family planning, and nearly eight out of ten knew at least one traditional method. Oral pill, injection, female sterilization and condom were the most commonly known methods, closely followed by IUD. Nearly all women, ever-married or currently married, stated they knew or had heard of oral pill, injection, female sterilization, and condom, and around 85 percent knew or had heard of IUD. Among the other methods, close to two-thirds or even higher of the ever or currently married women had the knowledge of periodic abstinence, male sterilization and implants, while over a half had the knowledge of withdrawal across all areas. Respondents rarely mentioned having heard of Menstrual Regulation (MR). There were almost no variations in knowledge of methods between the evermarried and currently married women anywhere in the sample, nor between project or non-project areas, nor by type of urban area. Everywhere, respondents among both ever-married women and currently married women knew, on average, over seven methods of family planning. However, knowledge of traditional methods was relatively less common in than a project areas than in the district or city project areas.

Table 5.1A Knowledge of contraceptive methods – currently married women

Percentage of currently married women who know any contraceptive method, by specific method, by city type and UFHP/non-UFHP area

Method	City	District	Thana	Total UFHP	Non-UFHP
Any method	99.9	99.9	100.0	99.9	100.0
Modern Methods Any modern method Pill IUD Injectables Condom Female sterilization Male sterilization Implants Menstrual Regulation	99.9 99.9 84.2 96.7 94.5 94.6 64.6 60.8 4.8	99.9 99.8 87.4 97.6 96.0 97.4 75.0 67.2 4.5	100.0 99.9 88.6 98.4 94.0 95.8 71.9 63.8 4.4	99.9 99.9 86.0 97.2 95.1 96.0 69.9 63.9	100.0 100.0 87.7 97.8 97.5 96.2 71.3 66.1 3.4
Traditional Methods Any traditional method Periodic abstinence Withdrawal Other  Mean number of methods known Number of women	77.7 70.2 55.3 4.6 7.3	77.8 71.2 56.2 4.2 7.6 2,222	71.3 64.1 47.1 3.2 7.3 430	77.2 70.1 55.0 4.3 7.4 4,925	79.3 71.3 57.5 3.9 7.5

Table 5.1B Knowledge of contraceptive methods – ever married women

Percentage of ever married women who know any contraceptive method, by specific method, by city type and UFHP/non-UFHP area

Method	City	District	Thana	Total UFHP	Non-UFHP
Any method	99.9	99.8	100.0	99.9	99.9
Modern Method	00.0	00.0	100.0	00.0	00.0
Any modern method Pill	99.9 99.8	99.8 99.8	100.0 99.9	99.9 99.8	99.9 99.8
IUD	83.9	99.8 86.9	87.9	99.8 85.6	99.8 87.5
Injectables	96.7	97.3	98.4	97.1	97.8
Condom	93.8	94.8	93.3	94.2	97.2
Female sterilization	94.6	97.1	96.1	95.9	96.2
Male sterilization	64.9	74.3	71.7	69.7	71.4
Implants	60.1	66.1	63.0	63.0	65.3
Menstrual Regulation	4.8	4.6	4.3	4.6	3.3
Traditional Method					
Any traditional method	76.4	77.0	70.2	76.1	78.1
Periodic abstinence	69.0	70.6	62.8	69.2	70.6
Withdrawal	53.5	54.2	46.4	53.2	56.0
Other	4.4	4.0	3.3	4.1	3.8
Mean number of methods known	7.3	7.5	7.3	7.4	7.5
Number of women	2,505	2,444	465	5,414	1,780

Table 5.2A presents knowledge of contraceptives, in percentages knowing at least three modern methods, by background characteristics of respondents. Knowledge of at least three methods being almost universal among women in the sample, there were little or no variations by any background characteristic of the women.

<u>Table 5.2A Knowledge of any 3 contraceptive methods by background characteristics</u>

Percentage of ever married women who know at least three modern contraceptive methods by selected background characteristics, UFHP and non-UFHP areas

Background characteristic	Knows any three modern methods <sup>1</sup>	Number of Women
Aga		
Age 10-14	88.0	69
15-19	95.8	647
20-24	99.0	982
25-29	99.7	982
30-34	99.7	932
35-39	98.5	726
40-44	98.4	580
45-49	98.6	481
43 47	70.0	401
Residence	98.5	2,505
City	98.7	2,444
District	98.6	465
Thana		
Highest Education Level		
No education	97.6	1,920
Primary	98.7	1,280
Secondary	99.3	1,537
Higher Secondary	99.8	437
University/ College	99.1	240
Total – UFHP	98.6	5,414
non-UFHP	99.5	1,780

<sup>&</sup>lt;sup>1</sup>Female sterilization, male sterilization, pill, IUD, injectables, implants, condoms, menstrual regulation

Knowledge of the results of appropriate method for spacing and limiting of births are presented in Table 5.2B.

Female and male sterilization contraceptive methods are developed specifically for couples who want to limit childbearing once and for all. They are not appropriate methods for those who are not certain that they would not want any more children in the future. A couple cannot have children after either the husband or the wife has been sterilized. All other methods of family planning, clinical or non-clinical, can be used for both spacing and limiting of births. But those are the methods designed to be generally used by couples wanting to space births rather than by those seriously wanting to limit births. They are generally not viewed as appropriate methods for limiting births, since women could become accidentally pregnant while using them. Respondents in the 2001 UFHP Evaluation Survey, who knew of at least one method, were asked to find out if they knew which methods are appropriate for spacing and which are appropriate for limiting.

In the UFHP project areas, among ever-married women who knew of at least one method, a high 73 percent considered female sterilization as an appropriate method for limiting births. But for male sterilization the comparable figure was only a negligible 6 percent, suggesting that women in UFHP areas generally do not view male sterilization as an appropriate method for limiting birth, even though a majority of women know of male sterilization. In contrast, a sizeable 22 percent mentioned oral pill and a sizeable 17 percent mentioned injection as appropriate methods for limiting births. For spacing of birth, women most often view oral pill as an appropriate method in the UFHP areas. About 80 percent of women there said they considered it as an appropriate method for spacing of birth. The next most often considered methods were injection (44 percent) followed closely by condom (38 percent). Relatively few women incorrectly identified sterilization as appropriate for spacing of births. There were little variations in knowledge of appropriate methods between project areas or by type of urban areas within the project areas.

Table 5.2B Appropriate Methods for Limiting or Spacing Births

Percentage of ever married women who report method as appropriate for limiting or spacing births, by city type and UFHP/non-UFHP areas

			Limiting		Spacing					
Limiting Method	City	District	Thana	UHFP	Non- UFHP	City	District	Thana	UHFP	Non- UFHP
Female sterilization	73.6	74.0	69.0	73.4	76.2	1.5	0.8	1.9	1.2	0.5
Male sterilization	4.9	5.7	7.0	5.5	5.4	0.0	0.2	0.0	0.1	0.1
Pill	20.9	23.3	20.8	22.0	21.1	78.5	79.7	78.7	79.1	79.8
IUD	8.9	9.1	7.6	8.9	8.4	16.8	18.3	17.4	17.6	19.2
Injectables	16.9	16.0	21.3	16.9	14.7	43.6	44.0	50.6	44.4	44.2
Implants	5.5	5.0	4.8	5.2	3.8	8.0	7.8	7.0	7.8	6.6
Condom	4.6	5.9	4.8	5.2	4.9	36.3	40.5	32.6	37.9	37.2
Periodic Abstinence	1.1	1.2	1.3	1.1	1.1	5.4	5.3	4.3	5.3	5.3
Menstrual Regulation	0.2	0.2	0.2	0.2	0.2	0.4	0.1	0.2	0.3	0.3
Withdrawal	0.4	0.8	0.6	0.6	1.0	2.8	3.8	3.9	3.4	2.5
Other	0.8	1.7	0.5	1.2	0.6	0.5	0.4	0.3	0.4	0.3

# **5.2** Current Use of Contraception

As in the BDHS and the UFHP Baseline Survey, current use of contraception was defined as the proportion of women who said they or their husbands were using a family planning method at the time of interview. Although ever-married women age 10 to 49 were interviewed, the question on current use was asked only of women who were currently married as it was not relevant for those who were past married. Table 5.3A shows the percent distribution of currently married women interviewed in the 2001 UFHP Evaluation Survey by current contraceptive use status according to five-year age group and other selected characteristics.

In UFHP project areas, more than 6 out of every 10 currently married women (61 percent) reported they or their husbands were using a family planning method. More than half reported using a modern method and another 10 percent reported using a traditional method. The NSDP should motivate the traditional method users to switch to modern methods while educating those not switching to use them properly. Oral pill continued to be the single most important method of contraception. This method accounted for 25 percent of modern method use in the sample from the urban project areas. The other commonly used methods were, in order of importance: male condoms (10 percent); injection (8 percent), and female sterilization (6 percent). Few women reported the use of IUD and even fewer reported the use of male sterilization and implants.

### **Differentials in Current Use**

Current use of contraception in the UFHP areas varied by the type of the urban area (Table 5.3A). The overall prevalence of contraceptive use was highest at 63 percent of currently married women for district municipalities and lowest at 55 percent for Thana Municipalities. It was at 60 percent for City Corporations. The variations were however less pronounced in the overall prevalence for modern methods, but there were variations in relative popularity of specific methods by type of urban areas. While male condom was the second most popular method after oral pill in the District Municipality and City Corporation areas, it was injection that was the second most popular method in Thana Municipality areas.

Contraceptive prevalence was higher in non-project areas than in project areas. In the non-project areas, 65 percent of currently married women reported using a family planning method, compared to 61 percent of those in the project areas. For modern methods, the differences were 54 percent versus 51 percent; and for traditional methods 11 percent versus 10 percent. In terms of use of individual methods, the variations were nowhere as marked as in the case of condom use, reported by 10 percent of currently married women in project areas and a higher 12 percent of those in non-project areas. The relative popularity of methods was the same in both the project and non-project areas, with oral pill being the most widely use method everywhere, followed by condom, injection, female sterilization and rhythm.

Age and the number of living children continued to be among the major determinants of contraceptive use among women in the UFHP areas. Women were most likely to use contraception in their 30s or after having at least 2 living children. Over 70 percent of women age 30-39 reported using a family planning method, compared to fewer than 50 percent of women age 15-19 and only 25 percent of those age 10-14. Lesser use of contraception by women in the younger age groups may be explained in that they were unwilling to use a family planning method until they have a child or a certain number of children, or children with a desired sex composition. While less than a quarter of women with no children said they were using a method, the proportion jumped to 65 percent with women having their first child and then to the highest 72 percent with women having 3-4 children. The drop in contraceptive use among women after age 40 or after having 4 or more children was possibly due to their declining fertility, real or perceived.

The popularity of specific methods was related to age. Oral pill was the most popular method among women under age 40, with condom usually being in the second. With the popularity of female sterilization rising among older women, it became the second most used method among women age 40-44 and the most widely used method for those in the oldest age group, 45-49. The popularity of traditional methods also rose with age, making them the most popular means of contraception among women age 40-44.

The influences of education on contraceptive use remain clearly evident among women in the UFHP areas. The likelihood of a woman using a family planning method increased consistently with her achievement of education. Fewer than 60 percent of currently married women who had no education at all reported using a family planning method. The rate rose to over 60 percent with women having at least some education (complete or incomplete primary), then to 65 percent with those having a higher secondary education, and thereafter, finally to nearly 70 percent with those having a college/university education. However, the given pattern of educational influences was less apparent in the overall rate of use of modern methods, which was found to decline after women achieved a college/university education. This was because women were more likely to prefer using a traditional method as they became more educated. While only 7 percent reported using a traditional method among women with no education, the percentage rose, with every increase in educational level, reaching a high of over 20 percent for university-educated women, making traditional methods the second most popular means of family planning among those having a college/university education. There were also notable variations by education in using individual modern methods. Injection was the second most popular method among women with no education or those with a complete or incomplete primary education. But with education the popularity of condom rose and that of injection dropped. Condom became the second most popular method among those with a secondary or higher education. Like injection, female sterilization became less popular with education.

Table 5.3A Current use of contraception by age and background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, UFHP/ non-UFHP

refeelt distribution of t	Junioning II	larried wor		опиасер	tive men	iou cuiic	may use	a, accordin	5 to backg	Tourid Citate	deterratios,	01111/1	1011-011			
		Total			N	Modern m	nethod	ı	ı	Total	Tradit	tional me	thod		Total	Number
Background Characteristics	Any method	Total modern method	Female steriliza tion	Male sterili- zation	Pill	IUD	Inject- ables	Implants	Condom	Total traditional method	Rhythm	With- drawal	Other	Not Using	1 otal	Womer
Age																
10-14	24.8	17.9	0.0	0.0	11.6	0.0	1.7	0.0	4.6	6.9	2.0	4.9	0.0	75.2	100.0	64
15-19	48.0	43.0	0.0	0.0	28.9	0.6	6.7	0.2	6.6	5.0	1.8	3.1	0.1	52.0	100.0	618
20-24	59.0	52.3	0.4	0.0	30.4	0.8	11.7	0.8	8.2	6.7	3.0	3.4	0.3	41.0	100.0	930
25-29	64.8	56.7	1.1	0.3	29.7	1.0	10.7	1.2	12.0	8.1	3.9	3.8	0.4	35.2	100.0	948
30-34	69.1	58.2	5.9	0.0	28.6	2.3	8.8	0.3	13.7	10.8	6.1	4.2	0.5	30.9	100.0	863
35-39	75.3	59.7	11.8	0.8	24.8	2.9	7.4	0.7	11.9	15.5	8.0	6.6	0.9	24.7	100.0	648
40-44	57.8	39.1	15.2	0.1	12.7	1.1	3.3	0.3	6.5	18.6	12.9	5.1	0.6	42.2	100.0	476
45-49	41.6	32.0	20.9	1.1	5.1	0.7	0.8	0.3	3.0	9.5	7.3	2.2	0.0	58.4	100.0	377
Residence																
City	60.0	49.7	6.1	0.3	24.3	1.4	7.3	0.4	9.9	10.2	5.6	4.0	0.6	40.0	100.0	2,272
District	62.6	52.3	6.1	0.2	25.6	0.9	8.8	0.9	9.8	10.3	5.7	4.4	0.2	37.4	100.0	2,222
Thana	55.4	47.7	4.4	0.2	27.7	1.0	7.7	0.1	6.6	7.7	3.8	3.3	0.6	44.6	100.0	430
Education																
No education	57.5	50.3	9.8	0.4	22.8	0.9	11.3	1.2	3.8	7.2	4.6	1.8	0.8	42.5	100.0	1,629
Primary	60.5	50.2	4.9	0.3	28.3	0.8	10.4	0.6	5.0	10.2	6.8	3.2	0.2	39.5	100.0	1,185
Secondary	62.2	52.1	3.6	0.1	28.5	1.5	5.3	0.1	13.0	10.0	4.5	5.3	0.2	37.8	100.0	1,460
Higher Secondary	64.8	50.8	3.8	0.0	19.8	2.2	2.3	0.2	22.5	14.0	6.6	7.4	0.0	35.2	100.0	424
University/ College	68.0	47.1	2.9	0.5	13.9	1.1	0.3	0.0	28.4	20.9	8.9	11.4	0.6	32.0	100.0	226
Number of living children																
0	23.5	18.1	0.4	0.2	8.8	0.0	0.0	0.0	8.7	5.4	1.7	3.7	0.0	76.5	100.0	588
1-2	65.1	55.2	3.1	0.2	30.2	1.4	8.6	0.5	11.3	9.9	4.9	4.8	0.2	34.9	100.0	2,403
3-4	71.8	59.7	11.8	0.5	24.8	1.5	10.7	1.0	9.3	12.1	7.6	3.7	0.8	28.2	100.0	1,362
5+	54.4	44.0	10.0	0.2	21.5	0.4	7.5	0.8	3.6	10.4	6.7	2.8	0.9	45.6	100.0	571
Total UFHP	60.7	50.7	6.0	0.3	25.1	1.2	8.0	0.6	9.6	10.0	5.5	4.1	0.4	39.3	100.0	4,925
non-UFHP	65.1	53.9	6.0	0.4	25.2	1.6	8.1	0.9	11.7	11.2	5.3	5.3	0.6	34.9	100.0	1,610
non-UFHP	65.1	53.9	6.0	0.4	25.2	1.6	8.1	0.9	11.7	11.2	5.3	5.3	0.6	34.9	100.0	

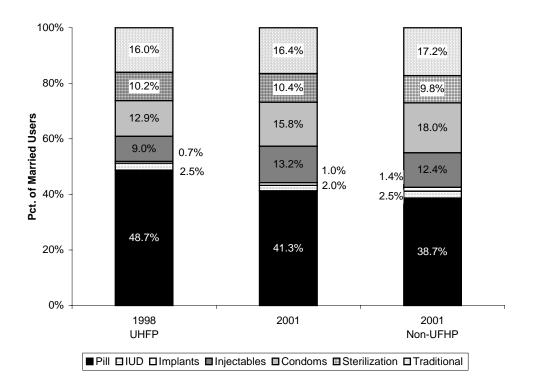
Note: If more than one method is used only the most effective method is considered in this tabulation.

# **Trends in Contraceptive Use**

Since the UFHP 1998 Baseline Survey, contraceptive prevalence has increased in project areas by less than 1 percent, from 59.9 to 60.7 percent of currently married women. The use of traditional methods has remained virtually unchanged at about 10 percent of currently married women. The use of modern methods rose only slightly from 50.3 to 50.7 percent of currently married women since the Baseline Survey.

Lack of change in overall contraceptive use masks shifts in the use of particular methods from 1998 to 2001. Specifically, the use of pills decreased in UFHP areas from 48.7 percent to 41.3 percent of users (Figure 5.1). This decrease was offset by an increase in the share of condoms, from 12.9 to 15.8 percent of users, and injectables, from 9.0 to 13.2 percent of users. In non-UFHP areas, the share of pills in contraceptive use is slightly lower than in 2001 UFHP areas (38.7 percent versus 41.3 percent), while the share of pills is higher (18.0 percent versus 15.8 percent).

Figure 5.1 Trends in Method Mix, 1998 and 2001



In project areas, there are small differences in the use of modern contraception by socioeconomic status (Figure 5.2). Women in lower asset quintiles are less likely to be using modern contraception than women in higher quintiles, although the differences are slight. Half of women in the highest asset quintile in UFHP areas were using modern contraception as compared with 48.5 percent of women in the lowest asset quintile. A more distinct positive relationship between contraceptive use and socioeconomic status is apparent in non-UFHP areas.

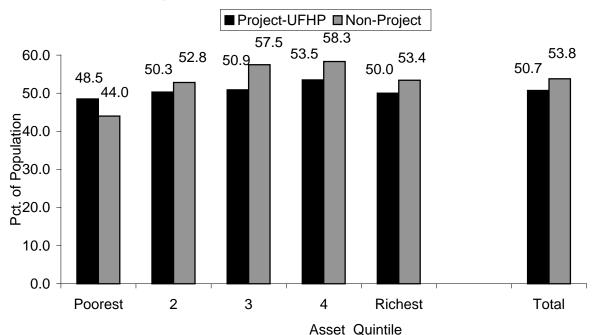


Figure 5.2. Modern Contraceptive Use by Married Women by Asset Quintile, Project and non-Project Areas

### 5.3 Current Use of Contraception by Married Adolescents

Shown in Table 5.3B is current use of contraception by currently married adolescent women in the sample. The contraceptive prevalence rate was 45.8 percent of married adolescents for all methods, appreciably lower than the 61 percent of all women currently using a family planning method there. About 41 percent of currently married adolescent women reported using a modern method. The most popular method of family planning among currently married adolescent women was oral pill, used by 27 percent of them. The other methods they generally were using were condom (6 percent), injection (6 percent) and traditional methods (5 percent).

There were obvious variations in contraceptive prevalence among currently married adolescent women of different UFHP areas. Currently married adolescent women age 15 to 19 in Thana Municipalities were far less likely to use a family planning method (37 percent) as compared to those in District Municipality (47 percent) or City Corporation (51 percent) areas. The pattern of variations was, however, somewhat different for younger adolescent women, who were less likely to use a method in both Thana Municipality (21 percent) and City Corporation (17 percent) areas than in District Municipality areas (37 percent). In terms of specific methods, there were noticeable differences among the different types of UFHP areas in the case of younger adolescent women. Younger adolescent women in City Corporation areas were unlikely to use any other method except condom and traditional methods, while those in the Thana and District Municipality areas were mostly dependent on oral pill. For older adolescent women however, there were little variations in the relative popularity of specific methods among the different types of areas. Like all currently married women, currently married adolescent women had higher contraceptive prevalence rates in non-project areas (51 percent) than in project areas (46 percent). Differences were evident between project and non-project areas in the use rates of almost every method.

Table 5.3B Current use of contraception by married adolescents

Percent distribution of currently married adolescents by contraceptive method currently used by city type and age, UFHP/non-UFHP

	Total			Modern me	ethod		Total	Trad	itional meth	nod			Number
Any method	modern method	Pill	IUD	Injec- tables	Implants	Condom	traditional method	Rhythm	With- drawal	Other	Not Using	Total	of Women
16.6	8.7	0.0	0.0	0.0	0.0	8.7	7.9	0.0	7.9	0.0	83.4	100.0	30
51.0	45.6	32.2	0.4	6.4	0.0	6.7	5.4	2.7	2.6	0.0	49.0	100.0	289
36.7	28.4	24.0	0.0	4.4	0.0	0.0	8.2	5.3	2.9	0.0	63.3	100.0	25
47.0	42.0	26.5	0.8	7.7	0.5	6.5	4.9	1.2	3.7	0.2	53.0	100.0	273
20.5	20.0	16.3	0.0	0.0	0.0	3.7	0.6	0.0	0.6	0.0	79.5	100.0	9
37.4	34.4	24.0	0.1	3.3	0.0	7.0	3.0	0.0	3.0	0.0	62.6	100.0	56
45.8	40.7	27.3	0.5	6.2	0.2	6.4	5.1	1.8	3.3	0.1	54.2	100.0	682
51.1	42.9	26.0	0.5	8.2	0.5	7.8	8.2	2.7	5.5	0.0	48.9	100.0	219
	16.6 51.0 36.7 47.0 20.5 37.4 45.8	Any modern method  16.6 8.7 51.0 45.6  36.7 28.4 47.0 42.0  20.5 20.0 37.4 34.4  45.8 40.7	Any modern method Pill  16.6 8.7 0.0 51.0 45.6 32.2  36.7 28.4 24.0 47.0 42.0 26.5  20.5 20.0 16.3 37.4 34.4 24.0 45.8 40.7 27.3	Any method method Pill IUD  16.6 8.7 0.0 0.0 51.0 45.6 32.2 0.4  36.7 28.4 24.0 0.0 47.0 42.0 26.5 0.8  20.5 20.0 16.3 0.0 37.4 34.4 24.0 0.1  45.8 40.7 27.3 0.5	Any method method Pill IUD Injectables  16.6 8.7 0.0 0.0 0.0 0.0 51.0 45.6 32.2 0.4 6.4  36.7 28.4 24.0 0.0 4.4 47.0 42.0 26.5 0.8 7.7  20.5 20.0 16.3 0.0 0.0 37.4 34.4 24.0 0.1 3.3  45.8 40.7 27.3 0.5 6.2	Any method Pill IUD Injectables Implants  16.6 8.7 0.0 0.0 0.0 0.0 0.0 51.0 45.6 32.2 0.4 6.4 0.0  36.7 28.4 24.0 0.0 4.4 0.0 47.0 42.0 26.5 0.8 7.7 0.5  20.5 20.0 16.3 0.0 0.0 0.0 37.4 34.4 24.0 0.1 3.3 0.0 45.8 40.7 27.3 0.5 6.2 0.2	Any method         modern method         Pill         IUD         Injectables         Implants         Condom           16.6         8.7         0.0         0.0         0.0         0.0         8.7           51.0         45.6         32.2         0.4         6.4         0.0         6.7           36.7         28.4         24.0         0.0         4.4         0.0         0.0           47.0         42.0         26.5         0.8         7.7         0.5         6.5           20.5         20.0         16.3         0.0         0.0         0.0         3.7           37.4         34.4         24.0         0.1         3.3         0.0         7.0           45.8         40.7         27.3         0.5         6.2         0.2         6.4	Any method         modern method         Pill         IUD         Injectables         Implants         Condom         traditional method           16.6         8.7         0.0         0.0         0.0         0.0         8.7         7.9           51.0         45.6         32.2         0.4         6.4         0.0         6.7         5.4           36.7         28.4         24.0         0.0         4.4         0.0         0.0         8.2           47.0         42.0         26.5         0.8         7.7         0.5         6.5         4.9           20.5         20.0         16.3         0.0         0.0         0.0         3.7         0.6           37.4         34.4         24.0         0.1         3.3         0.0         7.0         3.0           45.8         40.7         27.3         0.5         6.2         0.2         6.4         5.1	Any method         modern method         Pill         IUD         Injectables         Implants         Condom         traditional method         Rhythm           16.6         8.7         0.0         0.0         0.0         0.0         8.7         7.9         0.0           51.0         45.6         32.2         0.4         6.4         0.0         6.7         5.4         2.7           36.7         28.4         24.0         0.0         4.4         0.0         0.0         8.2         5.3           47.0         42.0         26.5         0.8         7.7         0.5         6.5         4.9         1.2           20.5         20.0         16.3         0.0         0.0         3.7         0.6         0.0           37.4         34.4         24.0         0.1         3.3         0.0         7.0         3.0         0.0           45.8         40.7         27.3         0.5         6.2         0.2         6.4         5.1         1.8	Any method         modern method         Pill         IUD         Injectables         Implants         Condom         traditional method         Rhythm         Withdrawal           16.6         8.7         0.0         0.0         0.0         0.0         8.7         7.9         0.0         7.9           51.0         45.6         32.2         0.4         6.4         0.0         6.7         5.4         2.7         2.6           36.7         28.4         24.0         0.0         4.4         0.0         0.0         8.2         5.3         2.9           47.0         42.0         26.5         0.8         7.7         0.5         6.5         4.9         1.2         3.7           20.5         20.0         16.3         0.0         0.0         3.7         0.6         0.0         0.6           37.4         34.4         24.0         0.1         3.3         0.0         7.0         3.0         0.0         3.0           45.8         40.7         27.3         0.5         6.2         0.2         6.4         5.1         1.8         3.3	Any method         modern method         Pill         IUD         Injectables         Implants         Condom         traditional method         Rhythm         With drawal drawal         Other           16.6         8.7         0.0         0.0         0.0         0.0         8.7         7.9         0.0         7.9         0.0           51.0         45.6         32.2         0.4         6.4         0.0         6.7         5.4         2.7         2.6         0.0           36.7         28.4         24.0         0.0         4.4         0.0         0.0         8.2         5.3         2.9         0.0           47.0         42.0         26.5         0.8         7.7         0.5         6.5         4.9         1.2         3.7         0.2           20.5         20.0         16.3         0.0         0.0         0.0         3.7         0.6         0.0         0.6         0.0           37.4         34.4         24.0         0.1         3.3         0.0         7.0         3.0         0.0         3.0         0.0           45.8         40.7         27.3         0.5         6.2         0.2         6.4         5.1         1.8	Any method method Pill IUD linjectables Implants Condom method Rhythm Withdrawal Other Using  16.6 8.7 0.0 0.0 0.0 0.0 8.7 7.9 0.0 7.9 0.0 83.4 51.0 45.6 32.2 0.4 6.4 0.0 6.7 5.4 2.7 2.6 0.0 49.0  36.7 28.4 24.0 0.0 4.4 0.0 0.0 8.2 5.3 2.9 0.0 63.3 47.0 42.0 26.5 0.8 7.7 0.5 6.5 4.9 1.2 3.7 0.2 53.0  20.5 20.0 16.3 0.0 0.0 0.0 3.7 0.6 0.0 0.6 0.0 79.5 37.4 34.4 24.0 0.1 3.3 0.0 7.0 3.0 0.0 3.0 0.0 62.6 45.8 40.7 27.3 0.5 6.2 0.2 6.4 5.1 1.8 3.3 0.1 54.2	Any method   method

Note: If more than one method is used only the most effective method is considered in this tabulation.

# **5.4 Sources of Family Planning Services**

Sources of family planning methods play an important role in the promotion and sustenance of contraceptive use in a population. As in the UFHP Baseline Survey, a major focus of the 2001 Evaluation Survey was on ascertaining the relative importance of different sources of family planning services in the UHFP project areas. The data were collected by asking the current users of modern methods where they obtained the method they were currently using. Reported sources were coded into six major categories: (i) public sector facilities including hospitals/medical colleges, family welfare centers, thana health complexes, maternal and child welfare centers (MCWC), rural dispensaries/community clinics, government satellite clinics/EPI out reach clinics and government field workers (FWAs); (ii) NIPHP/UFHP supported NGO clinics including both static and satellite clinics; (iii) other NGO clinics including hospitals, both static and satellite clinics, field workers; (iv) private medical sector including private hospitals/clinics, doctors—qualified or traditional, and pharmacies; (v) other private sector sources including shops and friends/relatives; and (vi) any other sources not belonging to any of the given categories.

As shown in Table 5.4D and Figure 5.3, the private medical sector was the predominant source of family planning methods in the UFHP project areas, more specifically the pharmacies. Over 50 percent of current users of modern methods reported that they obtained their methods from a private medical sector source, with most (49 percent) obtaining the methods from a pharmacy. The public sector was the next common source providing methods to over a fifth of the modern method users. In this sector, government hospitals/medical colleges (7.6 percent) were the most used source, followed by MCWCs (Maternal and Child Welfare centers) as a close second (5.3 percent). The NIPHP/UFHP supported clinics emerged as the third most important source of family planning methods. More than one out of every 10 modern method users (12 percent) got their methods from an NIPHP/UFHP supported NGO clinics—5 percent from a static clinic and a higher 7 percent from a satellite clinic.

Since the 1998 Baseline Survey, UFHP providers have increased their share in the supply of modern contraception from 7.2 percent of users to 11.7 percent of users (Figure 5.3). The largest increase in share has been for pharmacies, increasing from 38.8 percent to 48.7 percent of users. Since the overall level of contraceptive use has remained fairly constant, these increases mean that other providers have experienced declining shares, notably the public sector and FWAs. In 1998, FWAs supplied 15.8 percent of modern contraception. In 2001, they supplied only 3.9 percent of modern contraception.

There were variations in the source by type of methods. The vast majority of the oral pill (71 percent) and condom (75 percent) users procured their methods from pharmacies. In contrast, the female sterilization procedure was mainly performed in the public sector facilities covering the vast majority of sterilization women (75 percent). There was, however, no particular sector that appeared to be dominant in the delivery of the other methods. Although about a half (49 percent) of IUD users had their IUD mostly from the public sector sources like hospitals/medical colleges, MCWCs and family welfare centers, more than one-fifth (23 percent) of them reported to have received the device from an NIPHP/UFHP source. For injection, NIPHP/UFHP sources and the public sector sources were the major providers, but NIPHP/UFHP sources (45 percent) served twice as many of the injection users than public sector sources (22 percent). The male sterilization and implants were used rarely by couples in the sample. However, most women reporting the use of male sterilization mentioned that their husbands had obtained the procedure from either a public sector source (45 percent) or a non-NIPHP/UFHP NGO source (39 percent). In contrast, more than half the users of implants had their method from NIPHP/UFHP sources, followed by public sector sources. It was evident that NIPHP/UFHP clinics had a substantial coverage of the services for clinical methods, although public sector facilities generally remained the main providers of those methods in the UFHP project areas.

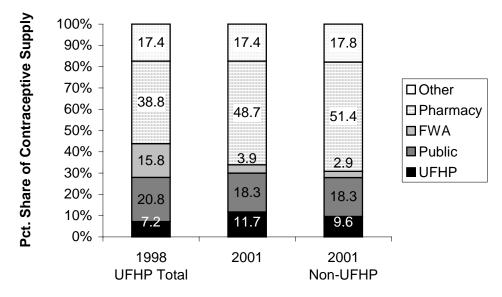
### **Differentials by Type of Areas**

There were virtually no variations in the importance of public sector sources as the single most important provider of female sterilization among the different types of urban areas, namely, City Corporation areas, District Municipality areas and Thana Municipality areas (Tables 5.4A, 5.4B and 5.4C). Everywhere in the sample, over 7 out of every 10 sterilized women reported receiving their procedure from a public sector source. However, women were less likely to receive their oral pills or condoms from pharmacies in Thana Municipality areas than in the District Municipality or City Corporation areas and less likely to receive their oral pills in District Municipality areas than in City Corporation areas, although pharmacies remained as the major suppliers of those methods in every urban center. There were also other notable variations by type of urban areas. For example, NIPHP/UFHP NGOs had 61 percent of injection users obtaining their method from them in Thana Municipality areas, compared to 54 percent in City Corporation areas and only 35 percent in District Municipality areas. Similarly, public sector sources had a coverage of 74 percent of IUD users in Thana Municipality areas, 57 percent in District Municipality areas and only 40 percent in City Corporation areas.

### **Project versus Non-project Areas**

There were little or no variations in sources of family planning methods between project and non-project areas (Tables 5.4D and E, Figure 5.3). In the non-project areas, as in the project areas, the private medical sector was the predominant source of family planning methods, followed by the public sector as the next common source. Surprisingly, the NIPHP/UFHP supported clinics emerged as the third most important source of family planning methods also for the non-project areas. Slightly fewer than 10 percent of modern method users in non-project areas reported receiving their methods from an NIPHP/UFHP supported NGO clinics, compared to slightly over 10 percent of those in the project areas. This could result from two reasons: either people from non-project areas also obtain services from NIPHP/UFHP clinics; or NIPHP/UFHP supported NGOs might conduct satellite clinics in some areas that were not assigned to them as their project areas. The relative importance of sources by type of methods remained about the same between the project areas and the non-project areas. For both project and non-project areas, pharmacies were the major suppliers of condoms and oral pills, and the public sector facilities the major provider of female sterilization procedure. There were also no remarkable variations in the sources providing IUDs and injection, between the project and non-project areas.

Figure 5.3 Distribution of Sources of Contraceptive Supply in UFHP and non-UFHP areas, 1998 and 2001



<u>Table 5.4A</u> Source of contraception – City Corporations

Percent distribution of current users of modern contraceptive methods by most recent source of method, according to specific method

Source of Method	Female Sterili- zation	Male Sterili- zation	Pill	IUD	Injectables	Implants	Condom	All Modern Methods
Public sector	75.2	15.9	8.0	40.5	13.9	40.9	6.7	18.8
Hospital/Medical College	44.7	0.0	2.2	12.9	4.1	0.0	2.3	8.4
Family Welfare Center	44.7	0.0	0.0	16.3	1.4	15.6	0.0	1.4
Thana Health Complex	18.9	0.0	0.2	0.0	1.5	0.0	0.0	2.8
MCWC	7.1	15.9	0.7	11.3	2.8	25.3	1.2	2.5
Rural Dispensary/Community Clinic	0.0	0.0	1.0	0.0	2.1	0.0	0.8	0.9
Satellite Clinic/EPI Outreach Site	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.1
FWA	0.0	0.0	4.0	0.0	1.3	0.0	2.5	2.6
NIPHP NGO	0.0	0.0	5.8	27.5	53.5	30.8	5.9	12.8
Static Clinic	0.0	0.0	1.6	19.5	16.3	30.8	2.1	4.3
Satellite Clinic	0.0	0.0	4.2	8.0	37.2	0.0	3.8	8.4
Depotholder	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other NGO	7.4	67.6	4.7	7.5	21.4	28.3	7.4	8.7
Hospital	1.6	32.9	0.2	0.0	0.7	0.0	0.0	0.7
Clinic	5.7	34.8	2.4	7.5	18.4	28.3	5.8	6.4
Satellite Clinic	0.0	0.0	0.4	0.0	1.5	0.0	0.0	0.4
Fieldworker	0.0	0.0	1.4	0.0	0.7	0.0	1.5	1.1
Depotholder	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1
Private medical sector	14.9	16.4	78.2	16.4	6.6	0.0	75.9	56.1
Private clinic/doctor	14.9	16.4	0.2	16.4	5.1	0.0	0.5	3.5
Traditional doctor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pharmacy	0.0	0.0	78.0	0.0	1.4	0.0	75.3	52.6
Other Private								
Shop	0.0	0.0	1.9	0.0	0.0	0.0	3.5	1.6
Friend/relative	0.0	0.0	0.7	0.0	0.0	0.0	0.5	0.4
Other	1.7	0.0	0.5	8.0	3.8	0.0	0.0	1.2
Don't know	0.8	0.0	0.2	0.0	0.0	0.0	0.0	0.2
Missing	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Women	152	7	552	32	167	9	225	1,145

<u>Table 5.4B</u> Source of contraception – District Municipalities

Percent distribution of current users of modern contraceptive methods by most recent source of method, according to specific method

Source of Method	Female Sterili- zation	Male Sterili- zation	Pill	IUD	Injectables	Implants	Condom	All Modern Methods
Public sector	72.6	82.9	14.9	56.9	28.4	25.7	6.2	24.2
Hospital/Medical College	36.1	82.9	1.4	33.6	7.5	0.0	0.1	7.5
Family Welfare Center	3.6	0.0	0.7	0.0	0.7	9.8	0.0	1.1
Thana Health Complex	11.7	0.0	0.8	0.0	1.7	0.0	0.2	2.3
MCWC	20.7	0.0	4.6	22.0	14.7	15.9	3.2	8.6
Rural Dispensary/Community Clinic	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Satellite Clinic/EPI Outreach Site	0.0	0.0	0.2	1.3	3.0	0.0	0.0	0.6
FWA	0.0	0.0	7.1	0.0	0.8	0.0	2.6	4.0
NIPHP NGO	0.0	0.0	4.5	16.7	35.4	60.7	3.8	10.1
Static Clinic	0.0	0.0	2.1	16.7	15.7	60.7	2.3	5.4
Satellite Clinic	0.0	0.0	2.4	0.0	19.8	0.0	1.5	4.7
Depotholder	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other NGO	8.7	0.0	6.1	3.3	22.2	13.5	4.6	8.9
Hospital	2.7	0.0	0.2	0.0	0.8	0.0	0.4	0.7
Clinic	6.0	0.0	2.6	3.3	14.0	13.5	0.7	4.8
Satellite Clinic	0.0	0.0	0.2	0.0	1.6	0.0	0.7	0.5
Fieldworker	0.0	0.0	2.9	0.0	5.8	0.0	2.8	2.9
Depotholder	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Private medical sector	16.1	0.0	67.3	23.0	4.7	0.0	75.1	49.5
Private clinic/doctor	16.1	0.0	0.0	23.0	3.2	0.0	0.7	3.1
Traditional doctor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pharmacy	0.0	0.0	67.3	0.0	1.5	0.0	74.5	46.3
Other Private								
Shop	0.0	0.0	3.0	0.0	0.0	0.0	5.4	2.4
Friend/relative	0.0	0.0	2.5	0.0	0.0	0.0	0.6	1.3
Other	1.4	0.0	1.7	0.0	8.2	0.0	1.1	2.6
Don't know	0.2	0.0	0.1	0.0	0.4	0.0	1.8	0.5
Missing	1.0	17.1	0.0	0.0	0.8	0.0	1.3	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Women	153	5	568	21	195	20	217	1,180

Table 5.4C Source of contraception- Thana Municipalities

Percent distribution of current users of modern contraceptive methods by most recent source of method, according to specific method.

Source of Method	Female Sterili- zation	Male Sterili- zation	Pill	IUD	Injectables	Implants	Condom	All Modern Methods
Public sector	83.3	100.0	23.8	74.0	25.0	8.9	11.7	29.2
Hospital/Medical College	25.7	100.0	1.3	0.0	0.0	8.9	0.7	3.6
Family Welfare Center	8.8	0.0	3.0	23.7	10.4	0.0	0.7	4.7
Thana Health Complex	39.5	0.0	2.9	26.7	7.9	0.0	2.5	7.6
MCWC	9.1	0.0	0.1	16.5	0.5	0.0	0.0	1.3
Rural Dispensary/Community Clinic	0.0	0.0	0.5	0.0	2.6	0.0	0.0	0.7
Satellite Clinic/EPI Outreach Site	0.0	0.0	1.3	0.0	1.0	0.0	0.0	0.9
FWA	0.3	0.0	14.7	7.1	2.6	0.0	8.5	10.3
NIPHP NGO	0.2	0.0	8.2	16.1	60.5	91.1	3.7	15.7
Static Clinic	0.2	0.0	4.3	16.1	21.6	91.1	1.2	6.8
Satellite Clinic	0.0	0.0	3.2	0.0	38.9	0.0	0.0	8.2
Depotholder	0.0	0.0	0.7	0.0	0.0	0.0	2.5	0.7
Other NGO	8.2	0.0	5.4	0.0	5.7	0.0	2.4	5.1
Hospital	3.7	0.0	0.3	0.0	2.8	0.0	0.0	1.0
Clinic	4.5	0.0	0.5	0.0	1.0	0.0	0.0	0.9
Satellite Clinic	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.3
Fieldworker	0.0	0.0	3.8	0.0	0.0	0.0	2.2	2.5
Depotholder	0.0	0.0	0.8	0.0	0.0	0.0	0.2	0.5
Private medical sector	3.6	0.0	52.9	1.0	8.8	0.0	67.4	41.7
Private clinic/doctor	3.6	0.0	0.7	1.0	0.0	0.0	0.0	0.8
Traditional doctor	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.3
Pharmacy	0.0	0.0	52.1	0.0	6.9	0.0	67.4	40.6
Other Private								
Shop	0.0	0.0	4.5	0.0	0.0	0.0	14.0	5.8
Friend/relative	0.0	0.0	2.3	0.0	0.0	0.0	0.0	4.5
Other	4.6	0.0	1.7	8.9	0.0	0.0	0.7	1.3
Don't know	0.0	0.0	1.3	0.0	0.0	0.0	0.1	1.7
Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Women	20	1	119	4	33	1	28	206

Table 5.4D Source of contraception- Total UFHP

Percent distribution of current users of modern contraceptive methods by most recent source of method, according to specific method

Source of Method	Female Sterili- zation	Male Sterili- zation	Pill	IUD	Injectables	Implants	Condom	All Modern Methods
Public sector	74.5	45.2	12.7	49.1	22.0	30.0	6.8	22.2
Hospital/Medical College	39.5	36.1	1.7	19.5	5.4	0.2	1.2	7.6
Family Welfare Center	4.4	0.0	0.6	10.9	1.8	11.4	0.0	1.5
Thana Health Complex	16.8	0.0	0.8	2.0	2.1	0.0	0.3	3.0
MCWC	13.6	9.2	2.4	15.6	8.5	18.4	2.1	5.3
Rural Dispensary/Community Clinic	0.2	0.0	0.5	0.0	1.1	0.0	0.4	0.5
Satellite Clinic/EPI Outreach Site	0.0	0.0	0.2	0.5	1.9	0.0	0.0	0.4
FWA	0.0	0.0	6.5	0.5	1.2	0.0	2.9	3.9
NIPHP NGO	0.0	0.0	5.4	22.7	45.2	52.4	4.8	11.7
Static Clinic	0.0	0.0	2.1	18.2	16.4	52.4	2.2	5.0
Satellite Clinic	0.0	0.0	3.3	4.5	28.7	0.0	2.5	6.7
Depotholder	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.1
Other NGO	8.1	39.0	5.4	5.4	20.4	17.7	5.8	8.5
Hospital	2.3	18.9	0.2	0.0	0.9	0.0	0.2	0.7
Clinic	5.8	20.0	2.3	5.4	14.8	0.0	3.1	5.2
Satellite Clinic	0.0	17.7	0.3	0.0	1.6	0.0	0.3	0.4
Fieldworker	0.0	0.0	2.3	0.0	3.2	0.0	2.1	2.0
Depotholder	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Private medical sector	14.8	9.5	70.7	17.7	5.8	0.0	75.0	51.9
Private clinic/doctor	14.8	9.5	0.2	17.7	3.8	0.0	0.6	3.1
Traditional doctor	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Pharmacy	0.0	0.0	70.6	0.0	1.9	0.0	74.5	48.7
Other Private								
Shop	0.0	0.0	2.6	0.0	0.0	0.0	5.0	2.2
Friend/relative	0.0	0.0	1.7	0.0	0.0	0.0	0.5	0.9
Other	1.7	0.0	1.2	5.1	5.7	0.0	0.6	1.9
Don't know	0.4	0.0	0.3	0.0	0.2	0.0	0.8	0.4
Missing	0.5	6.3	0.0	0.0	0.7	0.0	0.6	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Women	325	13	1,238	57	395	30	471	2,530

Table 5.4E Source of contraception- non-UFHP

Percent distribution of current users of modern contraceptive methods by most recent source of method, according to specific method

Source of Method	Female Sterili- zation	Male Sterili- zation	Pill	IUD	Injectables	Implants	Condom	All Modern Methods
Public sector	80.2	42.9	10.1	52.0	17.7	53.3	5.3	21.2
Hospital/Medical College	45.9	28.6	1.2	28.0	5.4	13.3	1.1	8.6
Family Welfare Center	3.6	14.3	0.7	4.0	0.8	6.7	0.0	1.2
Thana Health Complex	17.1	0.0	1.0	4.0	0.8	13.3	0.0	3.1
MCWC	13.5	0.0	1.2	16.0	6.9	20.0	0.5	4.2
Rural Dispensary/Community Clinic	0.0	0.0	1.0	0.0	2.3	0.0	1.1	1.0
Satellite Clinic/EPI Outreach Site	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.1
FWA	0.0	0.0	4.9	0.0	0.8	0.0	2.7	2.9
NIPHP NGO	0.0	0.0	4.2	8.0	42.3	13.3	4.8	9.6
Static Clinic	0.0	0.0	1.2	8.0	8.5	13.3	1.1	2.5
Satellite Clinic	0.0	0.0	3.0	0.0	33.8	0.0	3.2	7.0
Depotholder	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1
Other NGO	6.3	0.0	4.7	12.0	28.5	33.3	6.4	9.4
Hospital	4.5	0.0	0.0	4.0	0.8	6.7	0.0	0.9
Clinic	1.8	0.0	1.7	8.0	22.3	26.7	3.7	5.8
Satellite Clinic	0.0	0.0	0.5	0.0	3.8	0.0	0.5	0.9
Fieldworker	0.0	0.0	2.5	0.0	1.5	0.0	2.1	1.8
Depotholder	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private medical sector	10.8	0.0	74.6	12.0	6.2	0.0	79.8	54.0
Private clinic/doctor	10.8	0.0	0.7	12.0	3.8	0.0	0.0	2.6
Traditional doctor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pharmacy	0.0	0.0	73.9	0.0	2.3	0.0	79.8	51.4
Other Private								
Shop	0.0	0.0	1.2	0.0	0.0	0.0	1.6	0.9
Friend/relative	0.0	0.0	1.2	0.0	0.0	0.0	0.5	0.7
Other	1.8	14.3	3.9	16.0	5.4	0.0	0.0	3.4
Don't know	0.0	28.6	0.0	0.0	0.0	0.0	1.1	0.5
Missing	0.9	14.3	0.0	0.0	0.0	0.0	0.5	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Women	111	7	406	25	130	15	188	882

A clear success of the UFHP program is that it provides a substantial proportion of the contraceptive needs of women in the lowest asset quintile (Table 5.5). Among current modern contraceptive users, women in the lowest asset quintile are more likely to use UFHP sources for contraception than women in higher asset quintiles. Approximately 11 percent of women in the lowest asset quintile use UFHP satellite clinics as compared with only 1.9 percent of women in the highest asset quintile. Overall, 17.0 percent of women in the lowest asset quintile use UFHP sources, whereas only 6.2 percent, of women in the highest asset quintile use UFHP sources. Pharmacies are the most common source for all women, though women in the highest asset quintile are nearly twice as likely to use pharmacies as women in the lowest asset quintile.

Table 5.5 Source of Modern Contraception by Asset Quintile										
Percent distribution of sources	s of modern co	ontraceptive	method by as	sset quintile	e, UFHP Pro	ject Areas				
		As	set Quintile							
Source	Poorest	2	3	4	Richest	Total				
Government										
Hospital	8.3	7.4	8.4	5.7	5.9	7.1				
Family Welfare Centre	2.4	2.2	0.3	1.2	1.3	1.4				
Thana Health Centre	6.7	2.6	2.4	1.9	0.9	2.7				
MCWC	8.4	7.3	4.1	3.3	4.0	5.3				
Rural Dispensary	0.2	0.1	0.8	1.0	0.4	0.5				
Satellite Clinic	1.4	0.6	0.0	0.3	0.0	0.4				
FWA	4.5	4.7	3.7	4.5	2.4	4.0				
UFHP										
Static Clinic	5.3	7.9	3.3	4.6	4.3	5.1				
Satellite Clinic	11.4	9.0	6.6	5.7	1.9	6.7				
Depotholder	0.3	0.0	0.1	0.0	0.0	0.1				
NGO										
Hospital	0.5	0.7	0.3	0.6	1.3	0.7				
NGO clinic	6.5	6.0	6.2	3.6	4.2	5.3				
Satellite Clinic	1.2	0.2	0.5	0.3	0.3	0.4				
Fieldworker	2.9	2.0	2.8	1.8	0.9	2.1				
Depotholder	0.1	0.0	0.1	0.5	0.0	0.2				
Private										
Private Doctor/Clinic	1.0	2.5	2.3	3.8	5.1	3.0				
Traditional Doctor	0.0	0.0	0.0	0.1	0.0	0.0				
Pharmacy	33.1	38.0	52.2	56.8	63.9	49.3				
Shop	2.1	3.2	3.0	1.5	1.4	2.3				
Friends/Family	1.4	1.4	0.9	0.6	0.3	0.9				
Other	2.3	3.4	1.2	1.6	1.0	1.9				
DK	0.1	0.7	0.5	0.0	0.5	0.4				
Missing	0.0	0.3	0.4	0.5	0.0	0.3				
Total	100.0	100.0	100.0	100.0	100.0	100.0				

## 5.5 Knowledge of Sources among Non-users

It may be that women who were not using family planning did not know of a source from which they could obtain a family planning method. It was therefore of interest to see if women not currently using any family planning method knew of a source of family planning methods. The other interest was to ascertain the relative popularity of NIPHP/UFHP clinics compared to other family planning sources, among the nonusers in the target population. Table 5.6 shows the knowledge of family planning sources among nonusers of family planning methods in the sample. Only 11 percent of women who were not currently using any family planning method said they did not know of any place where they could obtain a method of family planning.

In UFHP areas, public sector facilities and pharmacies were the most known of family planning sources among nonusers-- public sector facilities being known to 26 percent of nonusers and pharmacies to 24 percent. NIPHP/UFHP sources (22 percent) were almost equally known. The popularity of the sources varied by type of urban areas. Both public sector facilities and NIPHP/UFHP sources were relatively more popular among nonusers in Thana Municipality areas than in the District Municipality or City Corporation areas, while the reverse was true in the case of pharmacies.

There were discernible variations in knowledge of source among nonusers between project and non-project areas. As expected, NIPHP/UFHP sources were relatively more known among nonusers in project areas than in non-project areas, but public sector facilities were also found to be more known in project areas. Pharmacies as sources of family planning methods were better known in non-project areas than in project areas, plausibly because public sector facilities were not as active in the delivery of family planning services in non-project areas.

Table 5.6 Knowledge of source for non-Users

Percent distribution of women who do not currently use a contraceptive method by knowledge of source of supply, by city type and UFHP/non-UHFP area

Source of method	City	District	Thana	UFHP	Non-UFHP
PUBLIC SECTOR	16.2	33.6	35.5	25.6	19.9
Hospital/Medical College	7.3	12.4	2.6	9.1	9.1
Family Welfare Center	1.3	1.3	10.5	2.2	2.0
Thana Health Complex	1.2	1.5	9.9	2.2	0.8
MCWC	3.4	14.8	3.7	8.3	5.4
Rural Dispensary/Community Clinic	0.7	0.1	0.4	0.4	1.0
Satellite Clinic/EPI Outreach Site	0.2	0.9	1.5	0.6	0.0
FWA	2.0	2.7	7.0	2.8	1.7
NIPHP NGO	23.7	19.4	27.7	22.2	15.1
Static Clinic	12.7	14.8	20.2	14.3	7.5
Satellite Clinic	11.1	4.5	7.5	7.9	7.5
Depotholder	0.0	0.1	0.0	0.0	0.0
OTHER NGO	13.8	7.3	5.2	10.2	12.1
Hospital	1.7	0.1	0.5	0.9	1.0
Clinic	9.8	5.5	3.1	7.3	9.5
Satellite Clinic	1.3	0.3	0.4	0.8	0.8
Fieldworker	1.0	1.3	1.2	1.2	0.8
Depotholder	0.0	0.2	0.0	0.1	0.0
PRIVATE MEDICAL SECTOR	29.8	25.0	17.1	26.5	36.0
Private clinic/doctor	3.7	1.0	1.0	2.2	2.2
Traditional doctor	0.1	0.1	0.1	0.1	0.1
Pharmacy	26.1	24.0	15.9	24.2	33.6
OTHER PRIVATE					
Shop	2.3	1.9	0.7	2.0	1.1
Friend/relative	2.3	1.9	0.7	2.0	1.1
Other	1.9	0.7	2.6	1.4	3.6
Don't know	11.3	11.6	10.9	11.4	11.0
Missing	0.6	0.2	0.2	0.4	0.7
Total	99.7	99.7	100.0	99.7	99.6
Number of Women	1,128	1,037	226	2,391	717

## **5.6 Contraceptive Discontinuation Rates**

A key concern for family planning programs is the rate at which contraceptive users discontinue using family planning and the reasons for such discontinuation. The life table contraceptive discontinuation rates in the survey population are given in Table 5.7. These rates are based on information collected in the five-year, month-by-month calendar in the survey questionnaire. All episodes of contraceptive use between April 1996 (the first month of Bengali year 1403) and the date of interview were recorded in the calendar, along with the main reason for any discontinuation of use during the period. Thus, the discontinuation rates presented in the table are based on all segments of use that started between April 1996 and three months prior to the date of interview. The month of interview and the two preceding months are ignored in order to avoid the bias that might be introduced by an unrecognized pregnancy.

The rates given in Table 5.7 are cumulative one-year discontinuation rates showing the proportion of users of a method who discontinued using the method within 12 months after they started it. The rates are calculated by dividing the number of discontinuations at each duration of use in single months by the number of months of exposure at that duration. The single-month rates are then cumulated to produce a one-year rate. In calculating rates, the reasons for discontinuation are treated as competing risks. For purposes of the table, the reasons are classified into four main categories: method failure (pregnancy), desire to become pregnant, side effects/health, and all other reasons. Switching from one method to another is not included as a reason for discontinuation.

Overall, 56.1 percent of users of contraception in UFHP areas discontinued use of their method within 12 months of beginning use. This percentage was lowest for individuals practicing periodic abstinence (53.5 percent) and pill (51.8 percent). The discontinuation rate was highest for users of condoms (71.0 percent). The most common reason for discontinuation were "other" reasons. Method failure as a reason for discontinuation was higher for traditional methods – periodic abstinence and withdrawal – than for other methods. The number of months of exposure for IUD use and implants was insufficient to present valid results.

Table 5.8 presents first year discontinuation rates for oral contraceptives, IUDs and injectables by city type and UFHP/non-UFHP area. Discontinuation rates were higher in non-UFHP areas than UFHP areas for all methods. Few differences were noted in discontinuation rates by city type.

Figure 5.4 shows that the overall discontinuation rates were slighter lower for UFHP areas (56.1%) than non-UFHP areas (58.3%). In UFHP areas, discontinuation rates were lower for than than city or district municipalities.

\_

<sup>&</sup>lt;sup>4</sup> The reasons for discontinuation included the following: infrequent sex/husband away; method failure/became pregnant; wanted to become pregnant; husband disapproved; wanted a more effective method; health concerns; side effects; lack of access; cost; inconvenient to use; fatalistic; entered a period of amenorrhea; marital dissolution; and other.

Table 5.7 First-year contraceptive discontinuation rates

Proportion of contraceptive users who discontinue use of a method within 12 months after beginning its use, by reason for discontinuation, according to specific method, UFHP areas

Method	Method failure	Desire to become pregnant	Side effects/ Health	Other	All reasons
Pill	3.4	5.8	5.1	37.6	51.8
Injectables	0.8	3.4	9.7	40.9	54.8
Condom	5.8	8.1	1.0	56.0	71.0
Periodic abstinence	7.3	5.2	0.1	40.9	53.5
Withdrawal	7.8	4.5	0.4	45.7	58.4
All methods	4.0	5.7	4.1	42.3	56.1

Note: Table is based on episodes of contraceptive use that began 3-59 months prior to the survey.

Table 5.8 First-year Discontinuation Rates for City types and Project/Non-Project Areas

Percentage of contraceptive users who discontinue use of a method within 12 months after beginning its use, by city type and UFHP/non-UHFP area

	Pill/Oral Contraceptives	IUDs	Injectables
City District Thana	52.0 52.6 46.2	41.1 28.4 28.1	57.1 53.1 52.3
Total UFHP	51.8	35.6	54.8
Total Non-UFHP	57.1	36.3	56.7

<sup>\*</sup> Denotes less than 125 months of exposure for method type.

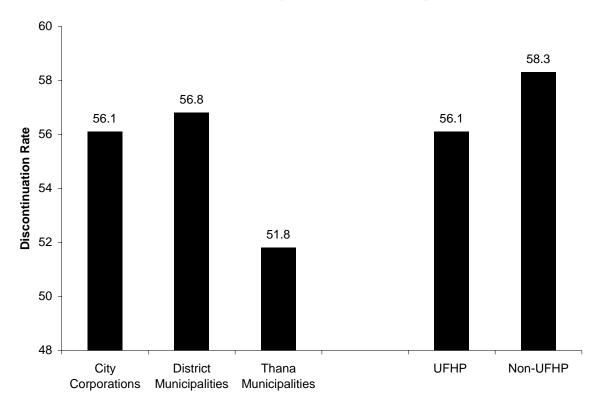


Figure 5.4 Discontinuation Rates for All Contraceptive Methods by City Type and UFHP/non-UFHP areas

## 5.7 Reasons for Discontinuing Contraceptive Method

Table 5.9 shows the reasons for discontinuations occurring during the 5 years, for the UFHP areas. The data are given for all discontinuations regardless of whether they occurred during the first 12 months of use or not. Side effects emerged as the most common reason of discontinuation. About 30 percent of all discontinuations in the 5 years before the survey were reported to have been for side effects. After side effects, the next most common reason was 'desire to become pregnant' followed by 'health concerns'. The most disturbing finding appeared to be that about 10 percent of discontinuations were due to accidental pregnancies, that is, becoming pregnant while using a method. More emphasis need to be given to educating the users on the appropriate use of their methods. Among the specific methods, side effects were the most important reason of discontinuation for IUD, injection, and implants. Side effects were mentioned as the main reason for over 50 percent of all discontinuations reported for those three methods. Side effects were also the most common reason of discontinuation for oral pill, with 30 percent discontinuing the method.

Although 'desire to become pregnant' was an important reason of discontinuation for every reversible method, it accounted for more discontinuations for oral pill, condom, periodic abstinence and withdrawal than for IUD, injection and implants. Method failure and desire to use more effective methods were among the reasons of discontinuations for periodic abstinence and withdrawal. Method failure was also an important reason of discontinuation for oral pill and condom. Husband's disapproval was cited as a major reason for condoms and withdrawal.

Table 5.9 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason for discontinuation, according to specific method, UFHP areas

Reason for Discontinuation	Pill	IUD	Inject- ables	Condom	Periodic abstinence	With- drawal	Implants	Other	All methods
Infrequent sex/husband away	5.4	0.0	4.0	6.2	3.2	2.0	2.5	0.0	4.9
Became pregnant while using	10.9	1.9	1.8	10.9	15.9	15.6	0.0	29.3	10.1
Desire to become pregnant	18.0	8.4	10.3	15.4	14.3	15.7	8.6	11.2	15.8
Husband/partner disapproved	0.8	0.0	0.6	18.2	8.5	16.3	0.0	0.0	6.2
Wanted more effective method	2.5	0.0	0.4	8.7	21.2	16.5	0.0	24.6	5.7
Health concerns	15.0	15.6	11.1	7.6	4.3	6.6	2.1	0.0	11.5
Side effects	30.2	53.0	51.3	5.4	2.0	2.7	65.5	16.1	24.3
Lack of access/availability	1.6	0.0	6.5	2.5	0.0	0.0	0.0	12.0	2.3
Costs too much	0.2	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.3
Inconvenient to use	3.9	4.7	0.4	14.7	5.1	9.2	0.0	0.0	6.3
Fatalistic	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Difficult to get pregnant/menopausal	1.0	0.0	2.3	0.6	4.6	2.2	4.3	0.0	1.4
Marital dissolution/separation	0.5	0.8	0.8	0.5	1.0	0.5	0.0	0.0	0.6
Other	8.4	15.5	8.2	8.3	15.4	11.0	17.1	6.7	9.1
Missing	1.5	0.0	1.2	1.0	4.5	1.7	0.0	0.0	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Women	2,575	91	722	1,211	364	305	16	11	5,296

### CHAPTER 6. INFANT AND CHILD MORTALITY

This chapter reports information on levels, trends and differentials in infant, child and under-five mortality. The data were compiled from the birth histories given by ever-married women. The birth histories included information on each live birth, whether or not births were twins, the sex of the child, the month and year of birth, whether or not the child still lives with the mother, and the age at death if the child died. Ages at death were recorded in days if the child died in the first month of life or in months if the child died before 24 months of age.

Mortality rates were calculated by direct methods and are defined as follows (per 1,000 live births):

Neonatal mortality rate: The number of children dying in the first month of life

Postneonatal mortality rate: The number of children dying after the first month of life but before the first

birthday

Infant mortality rate: The number of children dying before the first birthday

Child mortality rate: The number of children dying after the first birthday but before the fifth

birthday

Under-five mortality rate: The number of children dying before the fifth birthday.

The mortality rates are calculated for each of the survey domains (City Corporations, District Municipalities and Thana Municipalities) and by UFHP and non-UFHP areas. Rates are also calculated for different covariates such as education levels, birth order, and birth spacing.

Trends in mortality rates can be examined by looking at rates in different five year intervals preceding the survey: 0-4 years prior to the survey, 5-9 years prior to the survey, and 10-14 years prior to the survey.

### 6.1 Assessment of Data Quality

Considerable effort was made during the training of interviewers to minimize any errors that might lead to age heaping in reports of mortality. Interviewers were instructed to probe for exact ages when dates corresponded to common heaping dates. For example, if a child was reported to have died at age one year, interviewers were instructed to ask if the child died at exactly one year or whether the child died before one year. Such heaping may bias infant mortality downwards, transferring infant deaths to child deaths.

### **6.2 Early Childhood Mortality Rates**

In the five years preceding the survey, the infant mortality rate was 53 deaths per 1,000 live births in UFHP areas (Table 6.1). The infant mortality rate was highest in District Municipalities (59.1 deaths) and lowest in City Corporations (47.5 deaths). However, City Corporations had the highest child mortality mortality between the first and fifth birthdays. In City Corporations, child mortality was 22.1 deaths per 1,000 live births, while both district and Thana Municipalities had child mortality rates of between 18 and 19 deaths per 1,000 live births. Non-UFHP areas had a considerably higher infant mortality rate and lower child mortality rate in the 5-year period preceding the survey than UFHP areas.

In all areas - including UFHP and non-UFHP areas, infant mortality has been declining (Figure 6.1). The largest declines have been between the 5-9 and 0-4 year periods preceding the survey. In UFHP areas, the decline was 19.2 deaths per 1,000 live births between the 5-9 and 0-4 year periods, while the decline was 16.4 deaths in non-UFHP areas. The cumulative decline over the 15 year period has been greater in non-UFHP areas; infant mortality rates declined by 30.9 deaths in non-UFHP areas but only 23.8 deaths in UFHP areas.

Thana Municipalities had the largest decline -40 fewer deaths per 1,000 live births from 1987-91 to 1997-2001. In the 10-14 year period prior to the survey, infant mortality was 91.7 deaths in Thana Municipalities, higher than in District Municipalities (74.5 deaths). By the most recent five-year period, infant mortality had declined to 52.6 deaths in Thana Municipalities but to only 59.1 deaths in District Municipalities.

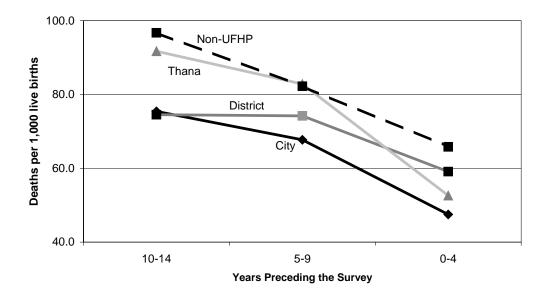
Table 6.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, by city type UFHP/non-UFHP.

	Neonatal	Postneonatal	Infant	Child	Under-five
Years preceding the	Mortality	Mortality	mortality	mortality	mortality
survey	(NN)	(PNN)	$(_{1}q_{0})$	$(_{4}q_{1})$	$(_{5}q_{0})$
City Corporations					
0-4	24.8	22.7	47.5	22.6	69.0
5-9	41.5	26.2	67.7	21.4	87.7
10-14	33.9	41.4	75.4	38.5	111.0
District Municipalities					
0-4	39.1	19.9	59.1	18.5	76.5
5-9	38.7	35.5	74.2	26.3	98.6
10-14	49.9	24.6	74.5	37.4	109.1
Thana Municipalities					
0-4	32.9	19.7	52.6	18.6	70.2
5-9	55.1	27.8	82.8	43.9	123.1
10-14	57.9	33.8	91.7	42.5	130.3
UFHP Areas					
0-4	31.8	21.2	53.0	20.4	72.3
5-9	41.6	30.7	72.2	26.1	96.4
10-14	43.7	33.1	76.8	38.5	112.4
Non-UFHP Areas					
0-4	38.1	27.7	65.8	14.3	79.2
5-9	46.5	35.7	82.2	23.3	103.6
10-14	55.2	41.5	96.7	27.6	121.6

Figure 6.1 visually represents the trend in infant mortality for UFHP and Non-UFHP areas for different time period preceding the survey.

Figure 6.1 Infant Mortality Rates, 1987-2001



### 6.3 Early Childhood Mortality by Regions and Socioeconomic Characteristics

Infant mortality rates differed by a variety of regional and socioeconomic characteristics. Using mortality rates for the 10-year period preceding the survey, all mortality rates, except postneonatal mortality rates were higher in Thana Municipalities and lower in City Corporations (Table 6.2).

Mortality is strongly associated with the educational attainment of a child's mother. In fact, children of women with no education were almost 6 times as likely to die before their first birthday as children of mothers with a university education. Child mortality is relatively uncommon for children of mothers with higher education. Only 7.9 percent of children born to mothers with some secondary education die between their first and fifth birthdays and virtually no children born to mothers of higher secondary education or above die during the same interval. In contrast, approximately 40 percent and 18 percent of children born to mothers with no education or primary education, respectively, do not survive from their first to their fifth birthdays.

As mentioned above, mortality is generally lower in UFHP areas than in non-UFHP comparison areas. During the 10-year pre-survey period, infant mortality rates were 11 deaths per 1,000 live births lower in UFHP areas than non-UFHP areas and child mortality rates were 4.5 deaths per 1,000 live births higher.

Table 6.2 Early childhood mortality rates by socioeconomic characteristic

Infant, child, and under-five mortality rates for the 10-year period preceding the survey by background characteristic, UFHP areas

	Neonatal	Postneonatal	Infant	Child mortality	Under-five
Background	Mortality	Mortality	mortality	$(_{4}q_{1})$	mortality
characteristic	(NN)	(PNN)	$(_{1}q_{0})$		$(_{5}q_{0})$
Residence					
City	33.1	24.4	57.5	22.0	78.3
District	38.9	28.2	67.1	22.6	88.2
Thana	44.3	23.9	68.1	31.6	97.6
Mother's education					
No education	44.0	38.1	82.1	39.3	118.2
Primary	40.9	26.5	67.4	17.5	83.7
Secondary	31.3	10.3	41.6	7.9	49.2
Higher Secondary	10.2	18.0	28.2	0.0	28.2
University/College	7.4	5.3	12.7	0.0	12.7
Total UFHP	36.8	26.1	62.9	23.2	84.7
Total non-UFHP	42.3	31.7	74.0	18.7	91.3

### 6.4 Demographic Characteristics and Mortality

Demographic characteristics are similarly associated with early childhood mortality. In most countries, boys tend to have higher mortality than girls during the first year of life. This is true in these data as well (Table 6.3). Infant mortality for boys is more than 30 deaths higher per 1,000 live birth than for girls. The differential is not as wide in non-UFHP areas, where the infant mortality rate for boys is 77.9 versus 70.1 for girls. Child mortality, on the other hand, is slightly higher for girls in UFHP areas, but starkly lower in non-UFHP areas.

In UFHP areas, mortality rates also differ by mother's age at birth, birth order and the length of the interval between births. Children born to mothers under age 20 and over age 40 are more likely to experience mortality before the age of one year. However, mother's age is negatively related to child mortality. No children of mothers over age 40 died during the ten-year period preceding the survey between their first and fifth birthdays. Over one quarter of children born to mothers under age 20 died.

Infant mortality is also higher for higher parity births. Over 10 percent of children that were seventh or higher order births died before their first birthday. Second or third parity births had only half the infant mortality rate. Closely related to birth order is birth spacing. Shorter birth intervals, often associated with a greater number of births, are strongly associated with all mortality rates. The infant mortality rate for births occurring less than 2 years after the previous birth was 129 deaths per 1,000 live births. The rate for births 3 or more years after the previous birth was only one-third of that.

Table 6.3 Early childhood mortality rates by demographic characteristics

Infant, child, and under-five mortality rates for the 10-year period preceding the survey by demographic characteristics, UHFP and non-UHFP areas

		UFHP				
Demographic	Infant	Child	Under-five	Infant	Child	Under-five
characteristic	mortality	mortality	mortality	mortality	mortality	mortality
	$(_{1}q_{0})$	$(_{4}q_{1})$	$(_{5}q_{0})$	$(_{1}q_{0})$	$(_{4}q_{1})$	$(_{5}q_{0})$
Sex of child						
Male	78.2	21.1	97.7	77.9	22.7	98.8
Female	46.6	25.5	70.9	70.1	14.8	83.9
Mother's age at birth						
<20	71.4	25.7	95.3	86.2	29.3	113.0
20-29	58.2	24.3	81.1	61.1	14.5	74.7
30-39	59.8	14.5	73.4	96.9	8.1	104.1
40-49	96.1	0.0	96.1	0.0	87.0	87.0
Birth order						
1	62.7	13.8	75.6	77.4	14.7	91.0
2-3	50.7	25.5	74.9	66.4	25.1	89.9
4-6	78.4	35.1	110.7	65.6	12.5	77.3
7+	101.4	15.2	115.0	188.4	17.1	202.2
Previous birth Interval <sup>1</sup>						
<2 years	129.1	52.2	174.5	79.6	17.7	95.9
2 years	61.4	33.0	92.4	106.6	27.8	131.5
3 years	44.2	25.0	68.1	44.0	19.2	62.3
4+ years	38.8	9.5	47.9	58.1	15.5	72.7

<sup>&</sup>lt;sup>1</sup> Excludes first-order births

### CHAPTER 7. REPRODUCTIVE AND CHILD HEALTH

A major concern in the 2001 UFHP Evaluation Survey was to provide an assessment of the reproductive and child health situation in the survey population, investigating such issues as antenatal and delivery assistance, complications of pregnancy and delivery, characteristics of the neonate, vaccinations, and common childhood illnesses and their treatment. The findings are presented in this chapter. The information is intended to assist policy makers in planning appropriate strategies for the NIPHP to improve reproductive and child health in the target populations.

Maternal Health Care services encompass three components—Antenatal Care (ANC), Delivery Care and Postnatal Care (PNC). Information on Antenatal Care (ANC), Delivery Care and Postnatal Care (PNC) is of great value in both ascertaining the levels of utilization of maternal health services and identifying subgroups of women who do not utilize such services. Child health services included in the Essential Service Package include vaccinations against basic childhood illnesses, periodic vitamin A, and treatment of child illnesses such as diarrhea or Acute Respiratory Infections (ARI). The information is useful in planning for improvements in the services.

### 7.1 Antenatal Care (ANC)

Antenatal care services facilitate detection and treatment of problems during pregnancy, such as anemia and infections, and provide an opportunity to disseminate health messages to pregnant women and their families. In addition, this early contact with the health care system can improve the timely and appropriate use of delivery care services.

## **Number and Timing of ANC visits**

Tables 7.1A shows the number and timing of ANC visits among the surveyed women who were pregnant in the 12 months prior to the survey. The number of antenatal care visits and the timing of the first checkup are considered important in preventing an adverse pregnancy outcome. Care is most effective if the visits are started early during pregnancy and continue at regular intervals throughout the pregnancy. It is generally recommended that antenatal care visits be made monthly for the first seven months, fortnightly in the eighth month, and then weekly until birth.

The coverage of antenatal care services, in terms of at least one contact with the medical sector by a pregnant woman, was slightly higher in the non-UFHP areas (81.8 percent v. 79.2 percent). Among women who had a live birth in the year preceding the survey, nearly 8 out of 10 stated that they made at least one visit for antenatal care during the time they were pregnant with the last live-born child. The median number of visits made by a pregnant women going for antenatal care visit was only 2.9 for births in the 12 months preceding the survey, far fewer than the recommended 12-13 visits. Approximately 39 percent of women having a live birth in the year preceding the survey had 4 or more antenatal visits. Only 36.3 percent of the women received antenatal care within the first three months of pregnancy, while another 25 percent did not receive the care until they were pregnant for four or five months and another 13.2 percent until they were pregnant for six or seven months. Among women who received care for births in the last year preceding the survey, the median duration of pregnancy at first visit was 4.4 months.

There were variations in utilization of antenatal care services in the UFHP areas by type of urban areas. Women were most likely to receive antenatal care in District Municipalities and least likely in Thana Municipalities. Just over 70 percent of women in Thana Municipalities with a live birth in the year preceding the survey reported having received antenatal care during the pregnancy for the last live birth, as compared to 83.7 percent of those in District Municipality areas and 76.8 percent in City Corporation areas. Similar variations were generally notable in the case of the other indicators in the table (Table 7.1A).

Table 7.1A Number of antenatal care visits and timing of first visit

Percent distribution of women who had <u>a live birth in the last one year</u> preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit, UFHP/non-UFHP areas

Number and timing of ANC visits	City	District	Thana	Total UFHP	Non - UFHP
Number of ANC visits					
None Number of ANC visits	23.2	16.3	29.4	20.8	18.2
1	11.4	16.2	15.8	13.8	11.5
2-3	24.8	28.9	26.5	26.7	30.9
4+	40.6	38.6	28.3	38.7	39.4
Don't know/missing	0.0	0.0	0.0	0.0	0.0
Bon t know/missing	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
	2.2	2.0		2.0	2.0
Median number of visits	3.2	2.8	2.4	2.9	2.9
(for those with ANC)					
Number of months pregnant at					
time of first ANC visit					
No antenatal care	23.2	16.3	29.4	20.8	18.2
<4	38.5	35.6	27.9	36.3	32.1
4-5	23.0	27.1	25.3	25.0	33.9
6-7	13.3	13.4	11.5	13.2	12.1
8+	2.0	7.6	5.8	4.7	3.6
Don't know/missing	0.0	0.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
N. P. d.					
Median months pregnant	4.0	4.6	4.0	4.4	4.0
at first visit (for those with ANC)	4.0	4.6	4.8	4.4	4.8
Number of Women	258	228	46	532	165

Use of antenatal care has increased in UFHP areas since the 1998 Baseline Survey, particularly in Thana Municipalities (Figure 7.1). Overall, antenatal care use by women with births in the year preceding the survey increased from 65.2 percent in 1998 to 79.2 percent of pregnant women in 2001. The increase was largest in Thana Municipalities, where the proportion of pregnant women receiving antenatal care increased from 50.0 percent to 70.6 percent. The increase was nearly as large in District Municipalities, from 65.0 percent to 83.7 percent of pregnant women.

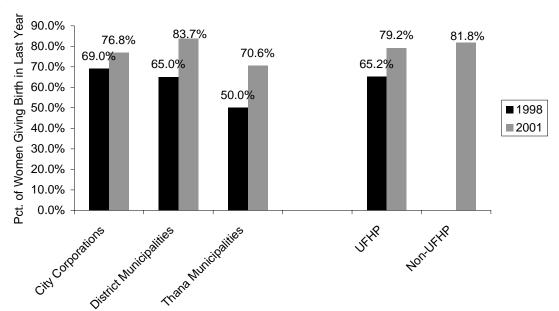
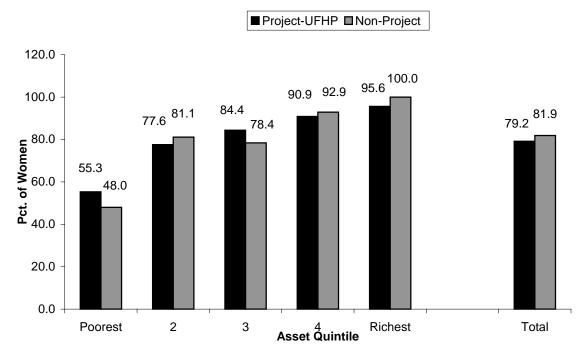


Figure 7.1 Trends in Antenatal Care for Births in the Year Preceding the Survey, 1998 and 2001<sup>5</sup>

Use of antenatal care is positively associated with socioeconomic status, but women in lower asset quintiles in UFHP areas are more likely to use antenatal care services than such women in non-UFHP areas. In UFHP areas, 95.6 percent of women in the highest asset quintile sought antenatal care but only 55.3 percent of women in the lowest asset quintile did (Figure 7.2). The difference in non-UFHP areas was larger; 100.0 percent of women in the highest asset quintile sought antenatal care but only 48.0 percent of women in the lowest asset quintile did. However, among women in the lowest asset quintile, 55.3 percent of those in UFHP areas sought antenatal care as compared with 48.0 percent of those in non-UFHP areas.

<sup>&</sup>lt;sup>5</sup> Values for 1998 are unweighted.

Figure 7.2 Percentage of Women with Birth in Year Preceding Survey Using ANC by Asset Quintile, UFHP and non-UFHP areas



The most common source of antenatal care in UFHP areas for births in the year preceding the survey was a private clinic/doctor, chosen by 28.5 percent of women who sought antenatal care (Table 7.1B). Roughly equal proportions of women chose UFHP static clinics (11.3 percent) and UFHP satellite clinics (11.0 percent). The public sector accounted for 28 percent of antenatal care, most commonly at MCWCs (12.5 percent) and hospitals/medical colleges (10.4 percent).

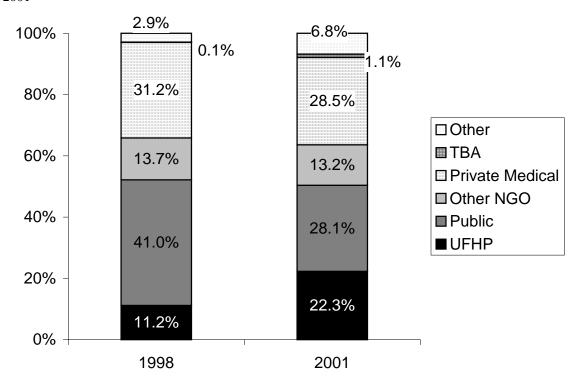
Overall use of antenatal care increased substantially from 1998 to 2001 from 65.2 percent of women with a birth in the last year to 79.2 percent of such women. The market share of UFHP providers among users of antenatal care doubled from 11.2 percent in 1998 to 22.3 percent of users in 2001 (Figure 7.3), the largest increase in share of any type of provider. The share of the public sector fell by 13 percentage points, from 41.0 percent to 28.1 percent of antenatal care users. While use of private medical care increased from 1998 to 2001, the share of private medical care providers fell from 31.2 percent to 28.5 percent. The share for other NGOs remained roughly constant.

Table 7.1B Source of Antenatal Care

Percentage of women with <u>a live birth in the year preceding the survey</u> by whether they had at least one antenatal care (ANC) visit during the last pregnancy by source of care, UFHP and non-UFHP areas

	City	District	Thana	UFHP	Non- UFHP
Percentage received ANC	76.8	83.7	70.6	79.2	81.8
Women with a birth in last year preceding the survey	258	228	46	532	165
Place of ANC checkup: HOME					
Medical person at home	0.7	2.9	0.0	1.7	1.5
Non-medical person at home	0.0	0.8	0.6	0.4	0.0
PUBLIC SECTOR					
Hospital/medical college	11.1	11.3	0.6	10.4	13.3
Family Welfare Centre	0.0	0.6	6.2	0.8	2.2
Thana Health Ccomplex	1.4	1.9	14.3	2.6	0.7
MCWC	4.1	22.6	5.3	12.5	11.1
Rural dispensary/Community Clinic	0.5	0.0	0.0	0.3	0.0
Satellite clinic/ EPI outreach site	0.0	1.2	1.9	0.7	0.7
FWA	1.4	0.4	0.0	0.8	0.0
NIPHP NGO	44.0	40.4		44.0	
Static clinic	11.8	10.1	15.6	11.3	4.4
Satellite clinic OTHER NGO	16.2	6.1	8.3	11.0	10.4
Hospital	2.0	1 4	4.1	1.0	2.0
Clinic	2.0	1.4	4.1	1.9	3.0
Satellite clinic	17.3 2.1	2.4	5.9 2.7	9.7	14.8 0.0
Fieldworker	0.0	1.0 0.0	0.0	1.6	0.0
PRIVATE MEDICAL SECTOR	0.0	0.0	0.0	0.0	0.7
Private clinic/doctor	25.0	32.7	25.6	28.5	32.6
Traditional doctor	0.7	1.2	1.8	1.0	0.0
Pharmacy	0.7	0.9	0.0	0.7	0.0
OTHER	4.5	2.0	5.9	3.5	4.4
Don't Know	0.0	0.6	0.0	0.3	0.0
Missing	0.6	0.0	1.1	0.4	0.0
Total	100.0	100.0	100.0	100.0	100.0
Number of Women	198	191	33	421	135

Figure 7.3 Sources of Antenatal Care, among users of antenatal care in 12 months preceding the survey, 1998 and 2001



As with use of modern contraception, UFHP antenatal care services tend to be used in greater proportions by the poor (Table 7.2). While the overall use of antenatal care may be lower in lower asset quintiles, use of UFHP sources is in fact higher among women in lower asset quintiles than among women in higher asset quintiles. Approximately 19 percent of women in the lowest asset quintile who had a live birth in the year preceding the survey used UFHP satellite clinics, but no women in the highest asset quintile did. Overall, 33.5 percent of women in the lowest asset quintile used UFHP sources as compared with only 2.9 percent of women in the highest asset quintile. Indeed, UFHP clinics are the main source of antenatal care services for the poor.

Table 7.2 Source of Antenatal Care by Asset Quintile

Pct distribution of sources of antenatal care for women having a live birth in the year preceding the survey by asset quintile, UFHP areas

Grand		2	2	4	D: 1	T-4-1
Source	Poorest	2	3	4	Richest	Total
At Home						
Medical Person at Home	8.0	0.7	0.0	1.5	0.0	1.7
Non-Medical Person at Home	0.0	1.5	0.0	0.2	0.0	0.4
Government						
Hospital	2.8	10.5	17.8	9.2	6.2	10.4
Family Welfare Center	4.0	0.7	0.0	0.0	0.0	0.8
Thana Health Center	3.6	3.4	2.0	1.6	3.5	2.6
MCWC	17.8	17.9	9.2	11.3	5.9	12.5
Rural Dispensary	0.0	0.0	1.0	0.0	0.0	0.3
Satellite Clinic	3.7	0.0	0.6	0.0	0.0	0.7
FWA	0.0	0.8	1.2	1.5	0.0	0.8
UFHP						
Static Clinic	14.4	14.0	6.8	17.1	2.9	11.3
Satellite Clinic	19.1	14.0	15.2	4.2	0.0	11.0
NGO						
Hospital	2.2	0.2	3.0	2.0	2.1	1.9
NGO Clinic	5.1	12.4	13.2	5.9	9.0	9.7
Satellite Clinic	5.3	2.3	0.0	1.5	0.0	1.6
Private Medical						
Private Clinic	7.8	14.7	22.3	41.0	65.8	28.5
Traditional Doctor	0.9	1.2	1.0	1.6	0.0	1.0
Pharmacy	0.3	0.0	2.6	0.0	0.0	0.7
Other	5.1	3.1	4.1	1.3	4.6	3.5
Don't Know	0.0	1.1	0.0	0.0	0.0	0.3
Missing	0.0	1.6	0.0	0.0	0.0	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

## 7.2 Iron Supplementation

A major focus of health services in Bangladesh is to provide pregnant women with iron supplements so that they do not become anemic during the pregnancy. Proportions of the survey women receiving iron tablets during pregnancy are shown in Table 7.3. Among women in the UFHP areas, who had a live birth in the year preceding the survey, over 6 out of 10 reported having taken iron tablets or iron syrup during the last (completed) pregnancy. There were, however, marked variations in the reception of iron supplements in the project areas by type of urban areas. The likelihood of pregnant women receiving iron supplements was highest in District Municipalities and lowest in Thana Municipalities. Among the women considered eligible to receive iron supplements in Thana Municipality areas, only 54.1 percent reported having received iron tablets or iron syrup, compared to 65.8 percent among those in District Municipality areas and 60.3 percent in City Corporation areas.

The chances of women receiving iron supplements were related to their age, parity and education. Older women were more likely to receive iron supplements than younger women. However, this pattern of relationship with age changes, showing a sharp drop in the proportions of recipients of iron supplements to 48 percent among women at age 35 and nearly 66 percent among those age 20 – 34 years. In terms of parity, women were more likely to receive these supplements if they were of lower parity than if they were of higher parity – the differences ranging from 31 percent to 75 percent. The relationship of reception of iron supplements with education was even more striking. The likelihood of women receiving iron supplements rose with every increase in their educational level. Only 43.6 percent of the women considered eligible for iron supplements reported to have received iron tablets or iron syrup among those who had no school education at all. The percentage rose to 60 percent with women having a primary level education; then, to 74 percent with those having a secondary education, and finally, to 85.8 percent with those having a college or university education. Between project and non-project areas, women in project areas were less likely to receive iron supplements – 62.1 percent versus 73.3 percent.

Table 7.3 Iron Supplementation (last one year)

Percent distribution of women who had a live birth in the last one year preceding the survey by intake of iron supplements during pregnancy for the most recent birth, according to background characteristics, UFHP and non-UFHP areas.

	Took Iron Tablet/Syrup During Pregnancy						
Background characteristic	Yes	No	Don't Know/ Missing	Total	Number of Women		
Age at birth							
10-14	55.4	44.6	0.0	100.0	12		
15-19	56.5	41.8	1.8	100.0	145		
20-34	65.9	33.4	0.7	100.0	346		
35-49	48.4	51.6	0.0	100.0	29		
Birth order							
1	74.8	23.8	1.5	100.0	172		
2-3	59.1	40.0	1.0	100.0	258		
4-5	59.3	40.7	0.0	100.0	62		
6+	30.8	69.2	0.0	100.0	39		
Residence							
City	60.3	38.1	1.5	100.0	258		
District	65.8	33.7	0.5	100.0	228		
Thana	54.1	45.9	0.0	100.0	46		
Education							
No education	43.6	55.8	0.7	100.0	174		
Primary	59.8	40.2	0.0	100.0	131		
Secondary	73.9	24.5	1.6	100.0	171		
Higher Secondary	91.1	8.9	0.0	100.0	39		
University/College	85.8	7.3	6.9	100.0	17		
Total UFHP Area	62.1	36.9	1.0	100.0	532		
Non-UFHP Area	73.3	26.7	0.0	100.0	165		

### 7.3 Tetanus Toxoid (TT) Vaccination

Tetanus Toxoid injections are given to women to protect them and their newborns from tetanus. Neonatal tetanus is a fatal disease caused by a pathogen transmitted under unhygienic conditions at childbirth. For full protection against neonatal tetanus, it is recommended that pregnant women receive two doses of the toxoid. However, if a woman was vaccinated for a previous pregnancy, she may only require one booster dose for the subsequent pregnancy. Five doses are considered to provide lifetime protection. As in the BDHS survey, tetanus toxoid coverage was examined among interviewed women in the 2001 UFHP Evaluation survey for their last live birth in the preceding five years before the survey. Women who had a live birth in the last five years were asked whether they had received any tetanus toxoid injection during the pregnancy with their last live birth and, if so, how many injections did they receive. Table 7.4A presents the estimates of tetanus toxoid coverage among the survey women by the number of tetanus injections they received during the pregnancy for their last live birth in the year preceding the survey. The actual protection may be higher than shown in the estimates, since women were asked about injections received during specific pregnancies.

Data upheld the widespread toxoid coverage of women during pregnancy. Only about 12 percent of women having a live birth in the year preceding the survey did not have any tetanus toxoid injection during the pregnancy for the last live birth in the UFHP project areas. More than 6 out of 10 women in UFHP areas received two or more tetanus injections during that pregnancy, while another 28 percent received one injection. Among the types of UFHP project areas, the coverage was slightly lower in the Thana Municipality areas, while there were practically no variations between the District Municipality and City Corporation areas. In the Thana Municipality areas, 55 percent reported to have received two or more injections, compared to slightly over 62 percent in the District Municipality and 59 percent in City Corporation areas. Like many other indicators, tetanus toxoid coverage was slightly higher for women the non-project areas than in the project areas.

Tetanus toxoid coverage varied with women's age, birth order and education. Gradually falling with age, the coverage of tetanus toxoid was generally lower for older women. While 70 percent of the women age 15-19 reported receiving two or more tetanus injections during the pregnancy for the last live birth, the proportion dropped with age to the lowest of 43 percent for those in the oldest age group, 35-49. It might be that many older women had had the complete course of five injections during the previous pregnancies. In terms of birth order, the data showed the women with lower birth order had a higher coverage of tetanus toxoid. But deviating from the general pattern, women in the youngest age group, 10-14, were found to have had slightly less coverage of tetanus toxoid during pregnancy, compared to the women in the immediate older age group, 15-19.

Education was the most important factor associated with variations of tetanus toxoid coverage. Women were less likely to receive tetanus injections if they had no education or if they had less education. Only 43 percent of the women in the no education category received two or more tetanus injections during the pregnancy for their last live birth. The rate rose sharply to 63 percent with women just having a primary level education and, then gradually to a high around 75 percent for women having a college or university education.

The public sector is the most prominent source of tetanus toxoid vaccinations (Table 7.4B), constituting 39.2 percent of vaccinations in UFHP areas for births in the past year. However, UFHP clinics – static and satellite – constitute a large proportion – 28.5 percent – of vaccinations as well. In UFHP areas in Chittagong, UFHP satellite clinics make up nearly a quarter of tetanus toxoid vaccinations and UFHP static clinics make up an additional 13 percent. In non-UFHP areas, UFHP clinics still constitute 12.7 percent of all vaccinations.

Table 7.4A Tetanus Toxoid Injections (last one year)

Percent distribution of women who had a live birth <u>in the last one year</u> preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, UFHP and non-UFHP areas.

	Number of Tetanus Toxoid Injections							
Background characteristic	None	One injection	Two or more injections	Don't know/ Missing	Total	Know recommende d # of TT	Number	
Age at birth								
10-14	23.0	9.9	67.1	0.0	100.0	33.5	12	
15-19	10.8	19.6	69.6	0.0	100.0	22.7	145	
20-34	10.1	32.0	57.6	0.4	100.0	19.9	346	
35-49	30.2	26.4	43.4	0.0	100.0	4.1	29	
Birth order								
1	5.8	8.1	85.4	0.8	100.0	19.8	172	
2-3	10.3	35.6	54.1	0.0	100.0	25.6	258	
4-5	16.2	45.0	38.8	0.0	100.0	9.2	62	
6+	39.3	36.3	24.4	0.0	100.0	3.2	39	
Residence								
City	13.1	26.9	59.4	0.5	100.0	20.5	258	
District	9.1	28.5	62.3	0.0	100.0	21.1	228	
Thana	15.6	29.3	55.1	0.0	100.0	13.8	46	
Education								
No education	23.1	33.7	43.2	0.0	100.0	13.6	174	
Primary	11.7	24.1	63.3	1.0	100.0	22.7	131	
Secondary	3.7	25.3	70.9	0.0	100.0	21.1	171	
Higher Secondary	0.0	26.5	73.5	0.0	100.0	35.0	39	
University/College	0.0	25.1	74.9	0.0	100.0	25.6	17	
Total UFHP	11.6	27.8	60.3	0.3	100.0	20.2	532	
Non-UFHP	9.7	21.2	67.9	1.2	100.0	10.9	165	

Table 7.4B Source of Tetanus Toxoid Injection (last one year)

Percent distribution of women with a live birth in the last one year preceding the survey who received a TT

injection by source of most recent TT injection, UFHP and non-UFHP areas

Source of most recent TT injection	City	District	Thana	UFHP Total	Non-UFHP
НОМЕ					
Medical person at home	2.8	0.6	0.3	1.6	2.0
Non-medical person at home	0.0	0.0	0.0	0.0	0.7
PUBLIC SECTOR	0.0	0.0	0.0	0.0	0.7
Hospital/medical college	6.0	23.4	5.2	13.6	18.8
Family Welfare Centre	1.1	2.0	6.1	1.9	2.0
Thana Health Ccomplex	1.2	2.5	12.5	2.7	2.0
MCWC	2.4	18.9	3.3	9.7	6.0
Rural dispensary/Community Clinic	0.5	0.0	1.5	0.3	2.0
Satellite clinic/ EPI outreach site	0.5	4.5	23.7	4.2	8.1
FWA	1.1	0.4	0.7	0.7	0.0
City Corporation Health Facility	4.3	8.9	1.5	6.1	8.7
NIPHP NGO				-	
Static clinic	12.8	13.3	9.0	12.7	4.0
Satellite clinic	24.4	6.5	15.2	15.8	7.4
OTHER NGO					
Hospital	4.1	1.3	3.0	2.8	3.4
Clinic	15.9	7.7	3.5	11.2	15.4
Satellite clinic	5.9	0.9	7.2	3.8	2.0
Fieldworker	0.0	0.3	0.0	0.1	0.7
PRIVATE MEDICAL SECTOR					
Private clinic/doctor	13.4	8.2	6.1	10.5	15.4
Traditional doctor	0.0	0.0	0.0	0.0	0.0
Pharmacy	3.0	0.0	0.0	1.4	0.0
OTHER	0.0	0.0	1.4	0.1	0.0
Don't Know	0.0	0.5	0.0	0.2	0.0
Missing	0.5	0.1	0.0	0.3	1.3
Total	100.0	100.0	100.0	100.0	100.0
Number of Women	224	207	39	470	149

## 7.4 Knowledge of Pregnancy Complications and Care

In promoting safe motherhood, women should be made aware of the life threatening complications they could potentially face during pregnancy, delivery or post delivery, of what they should in case those complications arise, and of the sources from which they could obtain medical services for the treatment of complications. Data were collected in assessing the extent of this awareness among the women surveyed.

Table 7.5A and Figure 7.4 show the percentage of women who mentioned specific complications of pregnancy that they thought were life threatening. Tetanus was the most commonly known complication of pregnancy among women in the UFHP areas, known to 54 percent of respondents. However, knowledge of other complications was low. The next most known as complications of pregnancy were obstructed labor (37 percent) and convulsion/eclampsia (31.6 percent), retained placenta (25.7 percent), poor positioning of fetus (24.7 percent) and excessive vaginal bleeding (22.7 percent). Only 6.4 percent of women did not know of a life-threatening complication of pregnancy. There were few variations in knowledge of life-threatening complications within the project areas. There were also no strong variations in knowledge of life-threatening complications within the project areas by type of urban centers, except that knowledge of convulsions/eclampsia as a life threatening complication was relatively less common among women in Thana Municipality areas (22 percent) than in the City Corporation and District Municipality areas (about 33 percent each), while tetanus was found most widely known in Thana Municipality areas (63.6 percent) and least widely in City Corporation areas (50 percent).

The most encouraging finding was that virtually all respondents, who were aware of a life-threatening complication, knew that whenever a woman experienced the complication she should seek medical assistance (Table 7.5B). Among the surveyed women, public sector facilities, particularly hospitals/medical colleges and Family Welfare Centers emerged as the most known of the sources to seek medical assistance for life-threatening complications of pregnancy. In response to the question about where could someone obtain medical services for the complication(s) they were aware of, over 90 percent of respondents mentioned hospitals/medical colleges and 90 percent of Family Welfare Centers, in the UFHP project areas (Table 7.5C). Private clinics/doctors were the next most known sources of medical assistance for treatment of complications, mentioned by 60 percent of the respondents in the UFHP areas. There were little or no variations in knowledge of sources of medical assistance for life-threatening complications of pregnancy between the project and non-project areas, or within the project areas by type of urban centers. Only around 20 percent of the respondents knew of UFHP clinic as sources of medical assistance for life-threatening complications of pregnancy in the UFHP project areas, compared with 16.6 percent of those in the non-project areas.

Table 7.5A Knowledge of Complications for Pregnancy

Percent distribution of women who know the complications threatening the life of a mother during pregnancy, delivery, or post delivery, according to regions, by city type and UFHP/non-UFHP areas

Problems Associated with Pregnancy	City	District	Thana	Total UFHP Areas	Non UFHP Areas
Severe Headache/Blurry Vision/High Blood Pressure Headache Edema/Pre-Eclampsia Convulsion/Eclampsia Excessive Vaginal Bleeding Foul-Smelling Discharge with High Fever Jaundice Tetanus Baby's Hand or Feet Come/Bad Baby Position Prolonged Labor Obstructed Labor Retained Placenta	10.6 9.9 32.5 22.5 0.9 6.2 50.1 26.6 14.2 34.8 24.2	7.9 11.5 32.6 23.8 0.4 4.6 56.4 22.0 13.1 39.2 26.9	9.5 8.1 21.9 18.2 1.1 3.9 63.6 28.2 13.5 38.5 27.3	9.3 10.5 31.6 22.7 0.7 5.3 54.1 24.7 13.7 37.1 25.7	10.4 10.3 28.9 23.2 0.4 5.4 52.8 26.1 13.3 39.7 29.1
Torn Uterus Other	3.2	2.7	2.9	2.9 22.6	2.2
Don't know	7.9	5.1	5.4	6.4	7.1
Number of women	2,505	2,444	465	5,414	1,780

Figure 7.4 Percentage of Women Identifying Complications of Pregnancy, UFHP and non-UFHP Areas

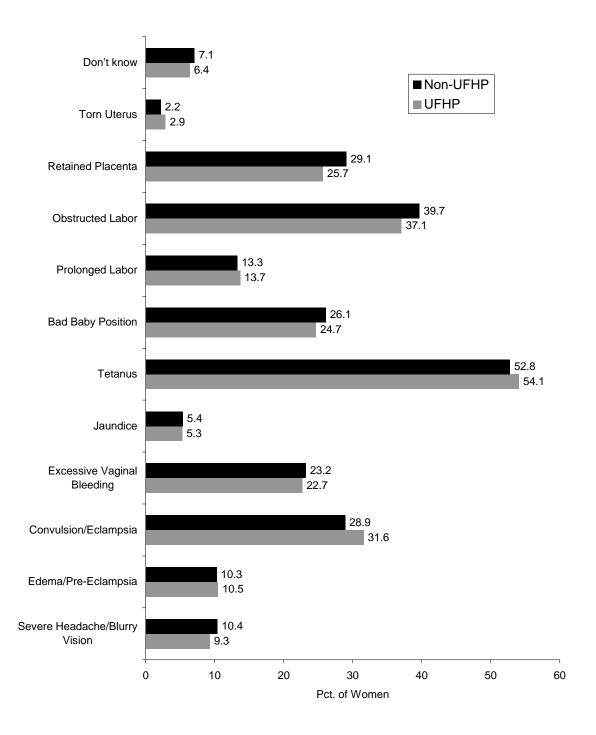


Table 7.5B Response to Complications of Pregnancy

Percentage of women who will seek care for complications of pregnancy through following mediums, for women who could identify complications of pregnancy, by background characteristics, UFHP/ non-UFHP areas

Background characteristic	Seek Medical Care	Consult Relatives/Friends	Pray to God	Don't Know/ Missing	Number of Women
Age at birth					
10-14	97.6	1.1	0.0	1.7	115
15-19	99.8	1.5	0.4	1.4	1,299
20-34	99.8	1.1	0.5	1.0	3,371
35-49	99.9	0.3	0.9	1.5	282
Birth order					
1	99.6	1.3	0.5	0.9	1,797
2-3	99.9	1.3	0.1	1.1	2,274
4-5	99.4	0.6	0.6	1.6	647
6+	99.5	0.9	2.7	2.1	349
Residence					
City	99.7	1.2	0.7	1.7	2,307
District	99.8	1.1	0.3	0.8	2,320
Thana	99.4	1.5	0.5	1.5	440
Education					
No education	99.6	0.9	1.0	1.5	1,772
Primary	99.9	1.0	0.4	1.6	1,191
Secondary	99.6	2.0	0.2	0.6	1,443
Higher Secondary	100.0	0.7	0.2	0.4	426
University/College	100.0	0.3	0.0	0.7	234
Total UFHP Area	99.7	1.2	0.5	1.3	5,066
Non-UFHP Area	99.7	0.7	0.1	0.8	1,654

Table 7.5C Knowledge of Potential source of medical services for complications of pregnancy

 $Percentage \ of \ women \ identifying \ specific \ sources \ of \ medical \ services \ for \ complications \ of \ pregnancy, \ by \ city \ type \ and \ UFHP/non-UFHP \ area$ 

Source of Care	City	District	Thana	Total UFHP	Non-UFHP
Home	3.6	2.3	2.2	2.9	4.2
Medical Person at home	3.3	2.1	2.1	2.6	3.8
Non-medical person at home	0.3	0.3	0.1	0.3	0.4
Public Sector	91.9	95.0	91.5	93.3	95.0
Hospital/Medical College	89.5	92.4	78.9	89.9	92.9
Family Welfare Center	2.9	2.4	6.6	3.0	1.9
Thana Health Complex	3.9	4.9	27.3	6.4	3.3
MCWC	7.4	22.3	3.4	13.8	11.8
Rural Dispensary/Community Clinic	0.6	0.2	0.2	0.4	0.0
Satellite Clinic/EPI Outreach Site	0.1	0.2	0.6	0.2	0.2
FWA	0.8	0.1	0.5	0.5	0.6
UFHP NGO	21.6	17.4	22.0	19.7	16.6
Static Clinic	18.6	16.8	21.1	18.0	16.4
Satellite Clinic	3.6	0.6	1.2	2.0	0.2
Other NGO	23.6	13.5	13.7	18.1	14.9
Hospital	10.0	3.9	7.7	7.0	5.8
NGO Clinic	13.9	9.7	6.1	11.3	9.0
Satellite Clinic	0.5	0.4	0.6	0.5	0.4
Fieldworker	0.5	0.1	0.3	0.3	0.2
Private Medical Sector	62.0	62.5	54.7	61.6	70.8
Private clinic/Doctor	60.5	61.9	53.2	60.5	69.9
Traditional Doctor	2.2	1.0	1.2	1.6	1.5
Pharmacy	0.9	0.7	0.8	0.8	0.4
Other	1.1	0.8	1.4	1.0	0.9
Don't Know	0.2	0.1	0.7	0.2	0.2
Number of women	2,300	2,315	437	5,052	1,649

#### 7.5 Delivery Care

Another important objective of maternal health services to reduce the health risks for mothers and their children is to increase the proportion of mothers having their babies delivered in health facilities under medical supervision. Proper medical attention and hygienic conditions during pregnancy would undoubtedly reduce the risk of complications and infections that can cause serious illness or even death for either the mother or the newborn. Regarding delivery care, two pieces of information were collected in the survey: one about the place of delivery and the other about the type of assistance during delivery.

## **Place of Delivery**

As shown in Table 7.6, in UFHP areas among women having a live birth in the five years, about a quarter had their last birth delivered at a health facility, compared to the rest (74.1 percent) having their birth delivered at home. Women giving birth at health facilities mostly used a private hospital/clinic (9.9 percent) or a government hospital (8.9 percent) followed by Maternal and Child Welfare Centers (3.9). Few women mentioned using used a Thana Health Complex, or an NGO facility. While reading out the findings in Table 7.6, it should be borne in mind that NIPHP/UFHP supported clinics do not have facilities for deliveries.

Table 7.6 also shows the differentials by place of delivery, according to the mother's age, birth order, education, and the number of their antenatal care visits. When distinguished by age, mothers under 20 were found less likely to go to a health facility for child delivery, compared to those age 20 to 34 – 18 percent versus about 28 percent or more. The variations by birth order were more striking showing the chance of a mother's having her child delivered at a health facility reducing with her every next birth. While only 31.4 percent of the women with the first birth order had their last child delivered at a health facility, the proportion was only 6.9 percent for those with the sixth or higher birth order. By the number of antenatal care visits, the variations were also striking. Only a very few mothers, less than 5 percent, with no antenatal care visit had their last baby delivered at a health facility, compared to 17 percent of those with 1 – 3 antenatal care visits and over 50 percent of those with 4 or more visits. It is thus seen that mothers making (more) antenatal care visits were more likely to have their baby delivered at a health facility than those making no (fewer) antenatal care visits. It may also be true that mothers who delivered their baby in health facilities were also more likely to have gone for antenatal checkups.

The most dramatic differentials by place of delivery were associated with education of mothers. Mothers would have greater preference to deliver baby in health facilities if they were educated than not educated, with the differences widening with the rising educational level. Only 8 percent of mothers having a live birth in the last five years, who had no education, had their last baby delivered at a health facility. The proportion rose to 12.7 percent with the mothers having a primary education, and thereafter, to nearly 35.3 percent with those having a secondary education or more.

### **Assistance during Delivery**

Table 7.7 shows the distribution of mothers, who had a live birth in the five years before the survey by the type of assistance they received during the delivery of their last live birth, according to background characteristics. In the UFHP areas, 61 percent of the mothers mentioned that they were assisted during the delivery of their last baby by traditional birth attendants (dais), with only 11.2 percent being assisted by trained dais and 49.6 percent by untrained dais. Another 6 percent, though small, mentioned the assistance of friends and relatives. Only 31 percent of the deliveries were assisted by medically trained personnel – about 21 percent by doctors and about 11 percent by nurses, midwives or family welfare visitors. These are the expected findings given that about a quarter of the deliveries occurred at a health facility. Mothers delivering a baby at home are more likely to be assisted during the delivery by non-medical personnel, and those delivering at a health facility are more likely to be assisted by medical personnel.

By following the patterns of differentials by place of delivery, women were thus found less likely to be assisted during child-birth by medically trained personnel in the Thana project areas (19.7 percent) than in the District (33 percent) or City Corporation (32 percent) project areas. Similarly, conforming to the differentials by place of delivery, women were found more likely to be assisted during child birth by trained medical personnel if they were at age 20 to 34 than under age 20, if they were with lower birth order than with higher birth order, if they had undertaken than not undertaken antenatal care visit or if they had more visits than fewer visits, and if they were educated than not educated or if they had more education than less education. Likewise, between the project and non-project areas, non-project areas had a higher proportion of child deliveries assisted by medically trained personnel – 36 percent compared to 31 percent for project areas.

Table 7.6 Place of delivery
Percent distribution of live births in the five years preceding the survey by place of delivery according to background characteristics, UFHP/ non-UFHP areas

		Public Sector			NGOs						
		Thana		NIPHP		Private			Don't		
Background	Gov't	Health	MCWC	Static	NGO Static	Hospital/	Home	Other	Know/	Total	Number
Characteristic	Hospital	Complex		Clinic	Clinic	Clinic			Missing		
Age at birth	•	•									
10-14	7.6	3.5	4.2	0.0	0.0	2.3	82.5	0.0	0.0	100.0	50
15-19	8.3	0.6	2.7	0.0	0.3	5.3	82.1	0.4	0.4	100.0	645
20-34	9.6	0.6	4.5	0.0	0.9	12.1	69.9	1.7	0.6	100.0	1,507
35-49	4.9	0.0	2.6	0.0	0.5	9.0	80.8	2.2	0.0	100.0	120
Birth order											
1	12.5	0.9	4.8	0.0	0.6	12.6	67.4	0.7	0.5	100.0	738
2-3	9.0	0.5	3.9	0.0	0.8	11.2	71.9	2.2	0.5	100.0	1,083
4-5	4.2	0.8	3.0	0.0	0.4	3.7	86.8	0.4	0.6	100.0	312
6+	2.5	0.0	2.3	0.0	0.3	1.8	92.3	0.0	0.7	100.0	189
Residence											
City	7.4	0.3	2.3	0.0	0.7	12.9	74.0	1.6	0.7	100.0	1,091
District	11.7	0.8	6.3	0.0	0.6	7.4	71.7	1.2	0.4	100.0	1,007
Thana	3.9	1.6	1.1	0.0	0.8	6.3	85.4	0.7	0.0	100.0	224
Education											
No education	4.1	0.3	2.2	0.0	0.1	1.2	91.5	0.0	0.5	100.0	806
Primary	5.7	1.0	3.0	0.0	0.2	2.8	86.6	0.5	0.4	100.0	580
Secondary	14.2	0.7	6.1	0.0	1.3	13.0	62.8	1.7	0.2	100.0	683
Higher Secondary	17.3	1.4	5.9	0.0	2.4	41.0	25.8	5.4	0.7	100.0	165
University/College	17.5	0.0	5.0	0.0	1.0	53.4	11.2	8.3	3.5	100.0	88
Antenatal care visits <sup>1</sup>											
None	2.6	0.6	0.5	0.0	0.0	0.7	95.0	0.0	0.5	100.0	690
1-3	8.5	0.4	3.4	0.0	0.6	2.9	83.1	0.3	0.7	100.0	776
4+	14.5	0.7	7.0	0.0	1.3	23.7	49.1	3.4	0.4	100.0	853
Don't know/missing	0.0	0.0	53.5	0.0	0.0	0.0	46.5	0.0	0.0	100.0	3
Total UFHP Area	8.9	0.6	3.9	0.0	0.7	9.9	74.1	1.3	0.5	100.0	2,322
Non-UFHP Area  Includes only the most rece	10.4	0.6	3.7	0.0	1.5	12.0	69.5	2.1	0.1	100.0	777

Table 7.7 Assistance during delivery
Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, according to background characteristics, UFHP/ non-UFHP

		Health Pro	ofessional		О	ther Person						
			Family		Trained		Unquali-			Don't		
Background characteristic	Qualified	Nurse/	Welfare	MA/	traditional	Untrained	fied	Relatives	Other	Know/	Total	Number
	Doctor	Mid-wife	Visitor	SACMO	birth attendant	TBA	Doctor			Missing		
Age at birth												
10-14	10.0	10.1	0.0	0.0	7.7	63.2	0.0	9.1	0.0	0.0	100.0	50
15-19	13.3	11.2	0.7	0.0	11.7	54.3	0.2	6.9	0.5	0.4	99.3	645
20-34	24.4	9.9	0.4	0.0	11.0	46.3	0.2	6.0	0.6	0.7	99.6	1,507
35-49	16.6	3.5	0.7	0.0	13.7	58.9	0.0	5.9	0.4	0.0	99.7	120
Birth order												
1	26.1	13.8	0.8	0.0	10.5	42.2	0.2	5.3	0.5	0.5	100.0	738
2-3	22.6	9.3	0.3	0.0	12.5	46.8	0.3	6.4	0.6	0.4	99.4	1,083
4-5	10.1	6.9	0.7	0.0	9.9	62.7	0.0	6.9	0.6	1.5	99.4	312
6+	5.0	3.5	0.1	0.0	9.2	72.4	0.2	8.6	0.0	0.0	98.9	189
Residence												
City	21.7	9.5	0.3	0.0	12.6	49.5	0.3	4.1	0.7	0.8	99.5	1,091
District	21.4	11.2	0.7	0.0	9.9	48.6	0.0	7.2	0.4	0.3	99.6	1,007
Thana	12.0	6.6	0.8	0.3	11.1	54.0	0.2	13.2	0.3	0.5	99.0	224
Education												
No education	5.3	4.3	0.2	0.0	9.3	71.7	0.3	7.3	0.5	0.5	99.3	806
Primary	8.6	9.0	0.3	0.0	12.7	58.7	0.2	8.7	0.8	0.8	99.8	580
Secondary	29.9	16.7	0.9	0.0	14.4	31.4	0.1	4.8	0.5	0.5	99.4	683
Higher Secondary	66.6	14.2	1.6	0.0	6.1	8.7	0.0	2.8	0.0	0.0	100.0	165
University/College	81.9	7.3	0.0	0.9	4.4	4.4	0.0	0.0	1.1	1.1	100.0	88
Antenatal care visits <sup>1</sup>												
None	2.0	4.2	0.0	0.0	8.5	72.1	0.4	11.0	0.3	0.6	99.2	690
1-3	12.0	10.2	1.0	0.0	15.4	52.8	0.2	5.9	1.1	1.0	99.5	776
4+	43.6	14.2	0.5	0.1	9.7	28.4	0.1	2.9	0.3	0.1	99.9	853
Don't know/missing	0.0	53.5	0.0	0.0	0.0	46.5	0.0	0.0	0.0	0.0	100.0	3
Total UFHP Area	20.6	9.9	0.5	0.0	11.2	49.6	0.2	6.3	0.6	0.6	99.5	2,322
Non-UFHP Area	26.0	9.4	0.3	0.0	9.5	49.3	0.0	4.5	0.5	0.4	99.9	777

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation

### 7.6 Childhood Vaccination

As per the WHO recommended international guidelines for the immunization of children against preventable diseases, children are supposed to receive a BCG vaccination against tuberculosis; three doses of DPT vaccine for the prevention of diphtheria, pertussis (whooping cough), and tetanus; three doses of polio vaccine; and a vaccination against measles. The WHO recommends that children receive all of the vaccines before their first birth day and that the vaccinations be recorded in a health card given to the parents.

In the 2001 UFHP Evaluation survey, as in the BDHS, information on childhood vaccination was obtained from both health cards and mothers' recall for all surviving children born during the five-year period before the survey. For a child where the health card was available, the interviewer copied from the card the date each vaccination was received. Where the health card was not given for a child or the mother was unable to show it, the mother was asked to recall whether the child had received BCG, polio, DPT (including the number of doses for polio and DPT), and measles vaccination.

## **Vaccination Coverage**

Table 7.8 presents the vaccination rates for children age 12 to 23 months, that is, by including only those children who had reached the age by which they should have been fully vaccinated receiving all the recommended vaccinations. Three rates are provided—one rate computed from the information copied from the vaccination cards, one rate computed from the information obtained from the mother's recall, and a third rate computed by combining the first and second rates, showing the total coverage of vaccination. For 57.7 percent of the children in UFHP areas, mothers were able to show the health cards. For the remaining 42.3 percent, the information was obtained from the mothers' recall.

Of children age 12 to 23 months in the UFHP areas, 45.8 percent were fully vaccinated according to the information obtained from the vaccination cards and another 16.6 percent according to the information obtained from the mothers' recall. Thereby, a total of 62.4 percent of children age 12 to 23 months in the UFHP areas were fully vaccinated receiving all the recommended vaccines by any age up to the date of interview. However, children receiving all the vaccines by the recommended age of 12 months, that is, by the first birthday was 56 percent, considerably lower than the total rate of 62 percent found fully vaccinated regardless of the age the vaccines were received by. Although coverage rates were high for BCG (95 percent) and the first doses of DPT (93 percent) and polio (93 percent), coverage rates dropped for the subsequent doses of DPT and polio as well as for the measles vaccine. Only 75 percent went for the third dose of DPT and 83.7 percent for the third dose of polio, while only 74.8 percent had the measles vaccine. Dropout rates between the first and third doses were about same for DPT (19 percent) and polio (21 percent). In order to raise the coverage of immunization of children, mothers need be told that a child should receive the vaccines by the first birthday and that, for a child to have full protection it is as equally necessary for the child to receive the second and third doses of DPT and polio and the measles vaccines as the BCG vaccine and the first doses of DPT and polio.

Coverage of childhood vaccination in the UFHP areas varied by type of urban areas. Thana Municipalities had the lowest coverage of childhood vaccination, while City Corporations and District Municipalities had the highest. Only 58 percent of children age 12 to 23 months received full vaccination in Thana Municipalities, as compared to 63 percent in City Corporation areas, and District Municipality areas. As in the case of most other indicators, non-project areas had relatively greater coverage of childhood vaccination than the project areas, with the differences for full vaccination between them ranging from 62.4 percent in project areas to 65.8 percent in non-project areas.

<u>Table 7.8 Vaccinations by source of information</u>

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, by city type and UFHP/non-UFHP area

(vaccination card of mother 3 report	, and pe	reemage	vaccini	ated by 1	2 1110111113	or age, t	y city ty	pe and or r	ii /iioii C		
Source of information			DPT			Polio		Measles	All <sup>1</sup>	No vaccin-	Number of
Source of information	BCG	1	2	3	1	2	3	Measies	All	ations	children
CITY CORPORATIONS		-									
Vaccinated at any time before the											
survey											
Vaccination card	60.4	59.5	58.1	54.1	59.5	58.1	54.1	47.6	47.3	0.0	166
Mother's report	36.7	34.9	30.3	23.0	33.4	27.9	27.9	27.2	15.6	2.3	108
Either source	97.2	93.6	88.4	77.1	92.9	86.0	82.0	74.8	62.9	2.3	274
Vaccinated by 12 months of age <sup>2</sup>	96.3	93.6	87.6	74.9	92.1	85.2	79.6	64.8	54.5	3.9	274
Valid Dates	95.5	93.9	90.8	82.6	94.7	92.4	82.6	73.7	68.3	0.7	166
DISTRICT MUNICIPALITIES											
Vaccinated at any time before the											
survey											
Vaccination card	54.7	54.1	52.4	51.4	54.1	52.4	51.4	44.8	44.8	0.0	127
Mother's report	39.8	38.1	33.3	22.6	40.3	36.8	35.8	31.6	18.2	4.4	105
Either source	94.6	92.2	85.6	73.9	94.4	89.2	87.1	76.3	63.0	4.4	233
Vaccinated by 12 months of age <sup>2</sup>	94.6	92.2	85.2	73.1	94.4	88.7	86.1	73.8	60.8	4.4	233
Valid Dates	99.3	98.9	95.2	93.9	98.3	94.7	92.5	76.5	74.4	0.0	127
THANA MUNICIPALITIES											
Vaccinated at any time before the											
survey											
Vaccination card	56.8	56.8	53.3	48.3	55.3	53.3	49.3	43.1	43.1	0.0	34
Mother's report	33.7	33.7	28.0	21.8	32.1	29.1	29.1	25.5	15.0	9.5	26
Either source	90.5	90.5	81.3	70.1	87.4	82.4	78.4	68.6	58.1	9.5	59
Vaccinated by 12 months of age <sup>2</sup>	88.0	88.6	76.4	67.6	85.6	77.3	75.5	55.5	46.7	9.6	59
Valid Dates	100.0	100.0	92.9	81.4	95.5	91.0	81.2	71.2	69.4	0.0	34
UFHP TOTAL											
Vaccinated at any time before the											
survey											
Vaccination card	57.7	57.0	55.3	52.4	56.9	55.3	52.5	46.0	45.8	0.0	327
Mother's report	37.7	36.1	31.3	22.7	36.1	31.7	31.2	28.8	16.6	3.9	239
Either source	95.4	93.1	86.5	75.1	93.0	86.9	83.7	74.8	62.4	3.9	566
Vaccinated by 12 months of age <sup>2</sup>	94.7	92.5	85.4	73.4	92.3	85.8	81.8	67.4	56.2	4.7	566
Valid Dates	97.4	96.4	92.7	86.9	96.2	93.2	86.3	74.5	70.8	0.4	327
NON-UFHP											
Vaccinated at any time before the											
survey											
Vaccination card	57.1	57.1	54.9	52.2	57.1	55.4	52.7	47.3	46.2	0.0	105
Mother's report	38.0	37.5	33.7	26.6	34.2	31.0	31.0	31.0	19.6	4.9	79
Either source	95.1	94.6	88.6	78.8	91.3	86.4	83.7	78.3	65.8	4.9	184
Vaccinated by 12 months of age <sup>2</sup>	95.1	94.6	87.7	77.0	91.3	85.5	81.8	70.5	_	_	184
Valid Dates	96.2	99.0	94.3	84.8	99.0	95.2	85.7	77.1	0.0	100.0	105

<sup>1</sup>Children who are fully vaccinated, i.e., those who have received BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth).

<sup>&</sup>lt;sup>2</sup>For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

Table 7.9A shows vaccination coverage rates among children age 12 to 23 months by selected background characteristics, including the child's sex and birth order, project and non-project areas, type of urban areas in project areas, and the mother's education. The figures refer to the proportion of children receiving the vaccinations by any age up to the date of interview, and they are based on information from both the vaccination cards and the mother's recall. The table also includes information on the proportion of children for whom a vaccination card was shown to the interviewer.

Differentials in childhood vaccination by gender were small, a sign of a great success towards removing male-female inequality in the society. Female children were slightly more likely to be fully vaccinated than male children – 63.2 percent versus 61.5 percent.

The chances of a child being vaccinated were closely linked to his or her birth order. A child had a much lower chance to receive a vaccine/vaccination if the child was of higher birth order than of lower birth order. Only 34.5 percent of children age 12 to 23 of sixth or higher birth order were found to be fully vaccinated, compared to 52.8 percent of those of fourth or fifth birth order and 67.4 percent of those of second or third birth order.

There were dramatic differentials in childhood vaccination associated with mother's education. The likelihood of children receiving childhood vaccinations sharply rose with mothers just having some education, and thereafter, even more sharply with every increase in their educational level. While only 41.3 percent of children received full vaccination among mothers in the no education category, the percentage jumped to 55 percent with mothers having a primary education, then to 85.6 percent for those with a secondary education and then finally to 90.4 percent for with a college/university education. Table 7.9B presents the same information for children with cards only.

Table 7.9A Vaccinations by background characteristics - Crude (Card and Mother's Report)

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, (according to vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, UFHP/non-UFHP areas

	1	1						1				
	200		DPT			Polio			1	No	Percentage	
Background	BCG		T _	_		_	_	Measles	$All^1$	vaccina	with a	Number
characteristic		1	2	3	1	2	3			-tions	vaccination	of
C C C1:11.1											card	children
Sex of Child	0.6.0	05.0	00.2	7.4	07.6	00.5	064	70.0	c1.5	2.7	62.2	265
Male	96.8	95.3	89.2	76.1	95.6	90.5	86.4	72.3	61.5	2.7	63.2	265
Female	94.2	91.2	84.2	74.2	90.6	83.7	81.4	77.0	63.2	5.0	52.9	301
Birth order												
1	97.6	96.4	89.3	77.4	95.3	87.8	84.7	77.9	65.0	2.4	63.6	198
2-3	97.5	95.6	89.5	79.7	95.5	90.8	88.7	78.7	67.4	1.5	59.5	257
4-5	90.6	86.7	79.5	64.6	84.8	76.6	67.9	67.7	52.8	9.4	42.8	72
6+	79.6	72.0	66.0	52.1	79.6	75.7	74.8	46.1	34.5	17.3	43.8	39
Residence												
City	97.2	94.5	88.4	77.1	92.9	86.0	82.0	74.8	62.9	2.3	60.4	274
District	94.6	92.2	85.6	73.9	94.4	89.2	87.1	76.3	63.0	4.4	54.7	233
Thana	90.5	90.5	81.3	70.1	87.4	82.4	78.4	68.6	58.1	9.5	56.8	59
Mother's education												
No education	90.0	86.8	74.7	59.5	86.8	75.7	69.8	55.4	41.3	9.4	46.6	196
Primary	97.5	93.8	88.1	72.4	93.3	89.8	85.7	70.5	54.9	1.6	58.3	138
Secondary	98.5	97.7	95.1	90.2	98.2	94.4	94.0	92.7	85.6	0.7	65.7	169
Higher Sec.	99.2	99.2	96.4	88.7	96.6	93.9	93.9	95.8	80.1	0.8	65.1	44
Univ./College	100.0	100.0	100.0	90.4	100.0	100.0	100.0	100.0	90.4	0.0	82.7	17
Omv./Conege	100.0	100.0	100.0	70.4	100.0	100.0	100.0	100.0	70.4	0.0	02.7	1 /
Total UFHP	95.4	93.1	86.5	75.1	93.0	86.9	83.7	74.8	62.4	3.9	57.7	566
Total non-UFHP	95.1	94.6	88.6	78.8	91.3	86.4	83.7	78.3	65.8	4.9	57.1	184
	l	l				ĺ	ĺ					

Children who are fully vaccinated, i.e., those who have received BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth.)

<u>Table 7.9B Vaccinations by background characteristics – Valid (Card Only)</u>

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, (according to vaccination card only), by background characteristics, UFHP/ non-UFHP areas

			DPT			Polio				No	
Background	BCG							Measles	$All^1$	vaccina-	Number of
characteristic		1	2	3	1	2	3			tions	Children
Sex of Child											
Male	63.2	63.2	61.6	57.7	63.2	61.6	57.9	48.4	48.4	0.0	167
Female	52.9	51.6	49.7	47.7	51.3	49.7	47.7	43.5	43.5	0.0	160
Birth order											
1	63.6	93.0	61.3	58.8	62.5	61.3	58.8	53.7	53.7	0.0	126
2-3	59.5	58.9	56.6	55.0	58.9	56.6	55.0	47.5	47.5	0.0	153
4-5	42.8	40.9	40.9	32.3	40.9	40.9	32.3	28.9	28.9	0.0	31
6+	43.8	43.8	41.8	39.4	43.8	41.8	40.9	25.4	25.4	0.0	17
Residence											
City	60.4	59.5	58.1	54.1	59.5	58.1	54.1	47.3	47.3	0.0	166
District	54.7	54.1	52.4	51.4	54.1	52.4	51.4	44.8	44.8	0.0	127
Thana	56.8	56.8	53.3	48.3	55.3	53.3	49.3	43.1	43.1	0.0	34
Mother's education											
No education	46.6	45.2	41.2	36.5	44.8	41.2	36.5	26.0	26.0	0.0	91
Primary	58.3	57.3	57.3	52.7	57.3	57.3	53.1	43.8	43.8	0.0	81
Secondary	65.7	65.7	64.5	64.1	65.7	64.5	64.1	61.5	61.5	0.0	111
Higher Secondary	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	0.0	29
University/College	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	0.0	14
Total UFHP	57.7	57.0	55.3	52.4	56.9	55.3	52.5	45.8	45.8	0.0	327
Total non-UFHP	57.1	57.1	54.9	52.2	57.1	55.4	52.7	46.2	46.2	0.0	105

<sup>&</sup>lt;sup>1</sup> Children who are fully vaccinated, i.e., those who have received BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth.)

As with antenatal care, DPT3 vaccinations are positively associated with socioeconomic status (Figure 7.5). In UFHP areas, the proportion of children receiving a DPT3 vaccination in households in the highest asset quintile is 25.8 percentage points higher than that for children in the lowest asset quintile (90.0 percent v. 64.2 percent). This positive association is evident in non-UFHP areas as well.

■UFHP ■non-UFHP 100 90.0 89.4 89.0 90 80.0 78.8 78.6 75.1 80 66.5 Pct. of Children 12-23 Months 64.2 70 58.1 60 50 40 30 20 10 Lowest 2 3 Highest Total Asset Quintile

Figure 7.5 DPT3 Vaccinations for Children 12-23 Months by Asset Quintile, UFHP and non-UFHP Areas

## Source of Vaccination

UFHP clinics – static clinics, satellite clinics and joint UFHP-EPI sessions – provided approximately 30 percent of all vaccinations (Table 7.10A). Government clinics provided an additional 24.8 percent of vaccinations, as did "other-not specified" sources (25,5 percent), presumably National Immunization Days. Other NGOs provided between 15 to 20 percent of vaccinations.

The share of UFHP providers in childhood vaccinations increased from approximately between 21.0 to 25.0 percent of any vaccination type in 1998 to between 26.6 to 29.7 percent of any vaccination in 2001 (Figure 7.6). These percentages differ by antigen. The largest increase in share was for DPT vaccinations, for which UFHP providers increased their share from 21.0 percent to 29.7 percent from 1998 to 2001. The share for other antigens increased slightly less.

Table 7.10A Source of vaccinations

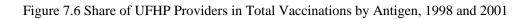
Percent distribution of children under 12-23 months year who had received specific vaccinations by the source of the vaccination, UFHP and non-UFHP areas

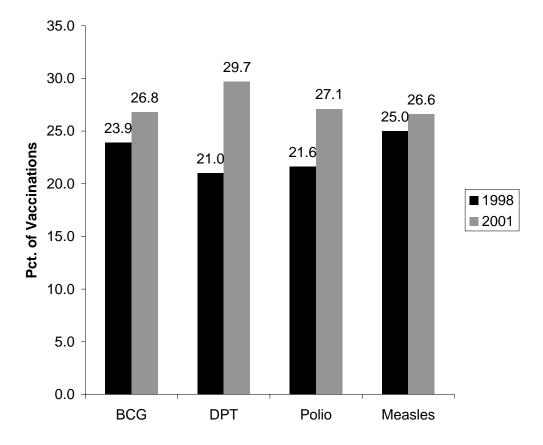
	City	District	Thana	UFHP Total	Non- UFHP
Course of DCC manipution					
Source of BCG vaccination UFHP Static clinic	10.7	10.0	10.1	11.2	6.2
		10.0 8.1	19.1 7.7	11.3	6.3 10.3
UFHP Satellite clinic	21.4	0.0	3.8	14.6 0.9	0.6
Joint NIPHP-EPI session	1.0				
Government clinic	16.7	36.1	28.1	25.7	34.9
FWA	2.4	1.9	0.5	2.0	0.6
Other NGO	24.9	10.7	2.3	16.9	13.1
Private	4.9	1.1	0.6	2.9	6.9
Other	18.0	32.1	37.8	25.7	26.3
Missing	0.0	0.0	0.0	0.0	1.1
Total	100.0	100.0	100.0	100.0	100.0
Number of Women	267	220	54	540	175.0
Source of Polio vaccination					
UFHP Static clinic	12.4	10.5	19.8	12.3	5.2
UFHP Satellite clinic	23.0	10.5	9.5	16.4	10.4
Joint NIPHP-EPI session	1.2	0.0	4.4	1.0	1.3
Government clinic	16.9	32.9	28.3	24.8	32.5
FWA	1.1	2.0	0.6	1.5	0.6
Other NGO	22.1	10.9	2.1	15.3	13.0
Private	4.7	0.6	0.7	2.6	6.5
Other	17.4	32.5	34.6	25.5	28.6
Missing	1.2	0.0	0.0	0.5	1.9
Missilia	1.2	0.0	0.0	0.5	1.7
Total	100.0	100.0	100.0	100.0	100.0
Number of Women	225	203	46	474	154

Table 7.10A Source of vaccinations

Percent distribution of children under 12-23 months year who had received specific vaccinations by the source of the vaccination , UFHP and non-UFHP areas

	City	District	Thana	UFHP Total	Non- UFHP
Source of DPT vaccination					
UFHP Static clinic	10.3	10.6	17.0	11.1	6.8
UFHP Satellite clinic	20.4	9.7	8.5	14.9	12.3
Joint NIPHP-EPI session	1.3	0.0	4.9	1.1	0.7
Government clinic	1.5	35.0	26.6	25.7	30.1
FWA	0.6	1.3	0.6	0.9	0.0
Other NGO	25.9				
Private	25.9 5.0	11.8 1.2	2.0 0.8	17.9 3.0	13.7 5.5
Other	17.9	30.4	39.5	25.1	28.8
Missing	0.6	0.0	0.0	0.3	2.1
Total	100.0	100.0	100.0	100.0	100.0
Number of Women	211	172	41	425	146
C CM l					
Source of Measles vaccination	10.4	10.1	10.6	10.1	<b>7</b>
UFHP Static clinic	12.4	10.1	19.6	12.1	5.6
UFHP Satellite clinic	17.8	8.6	11.7	13.4	13.9
Joint NIPHP-EPI session	1.4	0.0	5.0	1.1	0.7
Government clinic	16.2	36.3	25.8	25.5	29.2
FWA	1.4	2.1	0.7	1.6	0.0
Other NGO	25.5	9.1	1.4	16.3	14.6
Private	4.5	0.8	0.0	2.5	6.9
Other	18.6	32.1	35.8	25.9	28.5
Missing	2.3	0.9	0.0	1.5	0.7
Total	100.0	100.0	100.0	100.0	100.0
Number of Women	205	178	41	423	144





#### **Trends in Childhood Vaccination**

Table 7.10B shows the rates of childhood vaccination in the first year of life among children age 12-59 months, revealing trends in achievements of childhood immunization programs over the five years preceding the survey. During the five-year period preceding the survey, the coverage of full vaccination of children rose in a regular fashion except for a slight fall in the fourth year preceding the survey. Only 42.6 percent of children age 48–59 months, who were born in the fifth year preceding the survey, were found fully vaccinated, according to the information obtained either from their vaccination cards or from their mothers' recall. This rate of full vaccination fell to 35 percent for children age 36 to 47 months born in the fourth year preceding the survey but rose to 44.7 percent for children age 24 to 35 months, born in the third year preceding the survey. A similar pattern was evident for specific antigens.

#### Table 7.10B Vaccinations in the first year of life

Percentage of children under five years of age at the time of the survey, who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, UHFP areas

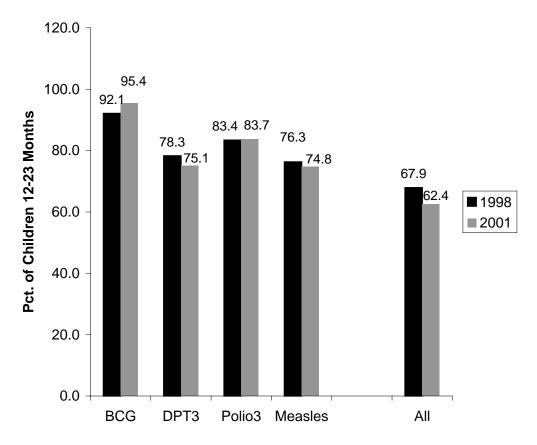
Current age			DPT			Polio				No vaccina-	Percentage with a	Number
of child in months	BCG	1	2	3	1	2	3	Measles	$All^1$	tions	vaccination card	of Children
monus											Caru	Cilidien
12-23	94.7	92.5	85.4	73.4	92.3	85.8	81.8	67.4	56.2	4.7	57.7	566
24-35	91.5	90.2	81.9	67.0	82.1	68.6	66.1	69.1	44.7	7.9	36.1	548
36-47	91.1	87.9	78.8	61.8	68.8	59.9	56.6	69.6	35.0	9.3	28.3	516
48-59	93.0	91.0	82.4	67.4	75.1	65.9	63.0	74.7	42.6	6.2	24.2	543
12-59	92.6	90.6	82.2	67.6	79.9	70.3	67.2	70.2	44.9	6.9	36.9	2,173

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.

<sup>1</sup>Children who are fully vaccinated, i.e., those who have received BCG, measles and three each doses of DPT and polio vaccine (excluding polio vaccine given at birth).

These data seem to contradict the trends in evidence from the 1998 Baseline Survey, indicating that vaccination coverage has declined for several antigens (Figure 7.7). In particular, DPT3 vaccinations fell from 78.3 percent of children 12 to 23 months in 1998 to 75.1 percent of children in 2001. Measles vaccinations fell by 1.5 percentage points as well, from 76.3 percent to 74.8 percent of children 12 to 23 months. On the other hand, the proportion of children receiving BCG vaccinations increased slightly – from 92.1 percent to 95.4 percent - and the proportion with polio vaccinations remained largely unchanged. One possible explanation is the different reference periods that are being considered. Table 7.10B refers to vaccinations by 12 months of age while Figure 7.7 refers to vaccinations completed at any time before the survey. In such a case, it is possible for the timing of vaccinations to improve so that a higher percentage of children are vaccinated before age 1, but the overall percentage of children vaccinated at any time has declined.

Figure 7.7 Trends in Vaccination Coverage for Children 12 to 23 months vaccinated at any time before the survey, 1998 and 2001



The use of UFHP static clinics for childhood vaccinations is higher among the lower asset quintiles, while use of UFHP static clinics is higher among the higher asset quintiles (Table 7.11). Approximately 34 percent of vaccinated children in the lowest asset quintile born in the year preceding the survey received their DPT3 vaccination from UFHP statellite clinics, as compared with only 5.6 percent of vaccinated children in the highest asset quintile. In contrast, 15 percent of children vaccinated in the highest asset quintile received their DPT3 vaccination from a UFHP static clinic, as compared with only 5.3 percent of those in the lowest asset quintile. Overall, approximately 40 percent of children in the lowest asset quintile who were vaccinated in the last year received their DPT3 vaccination from a UFHP provider. This compares with approximately 24 percent of those in the highest asset quintile. Results are similar for polio3 and BCG. Overall, UFHP clinics are the main source of DPT3 and Polio 3 vaccination services among the poor.

Table 7.11 Source of Vaccination by Asset Quintile

Pct. distribution of source of vaccination by asset quintile for children under 12 months of age, UFHP areas

OTTI areas					ı	
	Lowest	2	3	4	Highest	Total
DPT3						
UFHP Static Clinic	5.3	15.7	11.3	22.2	15.1	13.8
UFHP Satellite Clinic	34.3	16.3	37.1	14.6	5.6	23.0
UFHP/GOB	0.0	0.8	0.5	2.2	3.6	1.3
GOB	21.1	16.4	12.0	18.9	25.2	18.3
FWA	2.8	0.5	0.0	0.0	0.0	0.7
NGO	17.9	21.7	20.4	17.2	27.3	20.6
Private	0.0	2.3	0.0	2.5	5.7	1.9
Other	17.2	26.3	17.1	20.1	14.8	18.9
DK	1.5	0.0	1.5	2.4	2.7	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Polio3						
UFHP Static Clinic	7.0	16.8	11.9	28.3	13.1	15.4
UFHP Satellite Clinic	35.5	12.9	37.5	12.9	8.0	22.9
UFHP/GOB	0.0	0.0	0.7	3.0	1.1	1.0
GOB	20.2	14.4	11.0	15.5	26.8	16.7
FWA	4.2	0.0	0.0	0.0	0.0	0.8
NGO	20.2	22.6	22.7	18.5	22.4	21.3
Private	0.0	2.7	0.0	0.0	4.3	1.2
Other	10.9	30.7	14.3	18.4	20.5	18.6
DK	2.2	0.0	1.9	3.4	3.8	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
BCG						<u></u>
UFHP Static Clinic	5.5	9.9	11.3	22.5	9.7	11.9
UFHP Satellite Clinic	29.5	21.0	27.0	16.7	4.9	21.2
UFHP/GOB	0.0	1.8	0.4	1.6	0.8	0.9
GOB	25.1	20.4	23.6	21.1	26.1	22.9
FWA	3.1	0.9	0.0	0.0	2.5	1.1
NGO	14.2	21.3	23.7	16.3	26.8	20.2
Private	0.0	1.7	0.0	1.9	7.7	1.7
Other	22.3	22.7	13.9	15.0	19.0	18.5
DK	0.4	0.3	0.0	4.8	2.6	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

## **Knowledge of Vaccination Schedule**

As mentioned above, a significant proportion of children begin the sequence of DPT and polio vaccinations but do not complete them. One possible explanation is that women do not know the number of vaccinations required for full protection and do not know the schedule of vaccinations. In order to examine this, women whose children aged less than one year had begun the sequence but had not completed the sequence at the time of the interview were asked if they knew the date for the next vaccination. Questions were asked only for those children whose mothers presented vaccination cards. In this way, it could be determined whether the answers provided followed the correct schedule. DPT vaccinations are recommended at 6, 10 and 14 weeks of age. Polio vaccinations are generally given concurrently. Answers regarding the dates for the succeeding vaccination were determined to follow standard guidelines if they were at least 4 weeks from the date of the preceding vaccination marked on the vaccination card but no more than 5 weeks from the date.

Table 7.12 shows that 91.5 percent of women in UFHP areas reported a date for the next DPT and next polio vaccinations. However, of these, only 63.3 percent reported a date deemed to be correct. Overall then, 57.9 percent (=91.5 x 63.3) correctly identified the date for the next DPT vaccination, while 56.4 percent (=89.7 x 62.9) knew of the correct timing for the next polio vaccination. Knowledge, not surprisingly, was generally higher and more likely to be correct for women with higher levels of education. Correct answers were also more common for children in City Corporations and less likely for children in Thana Municipalities. Oddly, correct answers differed for male and female children.

Table 7.12 Knowledge of next shot by background characteristics

Percentage of mothers of children aged less than 1 year with immunization cards who report a date for the next DPT and Polio immunizations and report a date within the

recommended interval for the antigen by background characteristics, UFHP/ non-UFHP areas

		DPT			Polio		Both DPT and Polio			
	Percentage of	Date recorded		Percentage of	Date		Percentage of	Dates recorded		
	children with	is within	Number	children with	recorded is	Number	children with date	are within	Number	
	date reported	recommended	of	date reported	within	of	reported for next	recommended	of	
Background	for next	interval	Children	for next	recommende	Children	immunization	intervals for	Children	
characteristic	immunization			immunization	d interval		for both	both		
							immunizations	immunizations		
Sex of Child										
Male	91.2	57.3	73	90.0	55.5	74	89.8	56.7	73	
Female	91.8	70.5	61	89.4	71.9	61	89.3	70.2	61	
Birth order										
1	90.6	59.2	43	87.1	57.8	43	87.1	58.3	43	
2-3	94.0	63.6	66	92.5	63.5	67	92.4	63.0	66	
4-5	90.2	69.1	17	90.2	69.1	17	90.2	69.1	17	
6+	79.2	71.3	8	79.2	71.3	8	79.2	71.3	8	
Residence										
City	95.8	67.9	64	92.4	65.2	66	92.2	66.7	64	
District	88.0	58.9	60	87.6	61.1	60	87.5	59.2	60	
Thana	84.5	57.2	10	84.5	57.2	10	84.5	57.2	10	
Mother's education										
No education	83.6	61.0	43	81.2	63.1	43	81.2	59.8	43	
Primary	89.7	70.9	37	86.4	69.8	37	86.4	69.8	37	
Secondary	100.0	55.3	41	100.0	53.2	43	100.0	55.3	41	
Higher Secondary	100.0	70.1	10	96.9	72.3	10	96.9	72.3	10	
University/College	81.2	100.0	3	81.2	100.0	3	81.2	100.0	3	
Total UFHP	91.5	63.3	134	89.7	62.9	136	89.6	62.8	134	
Total non-UFHP	86.5	46.9	37	86.5	50.0	37	86.5	46.9	37	

'Polio 0 is the polio vaccination given at birth. (excluding polio vaccine given at birth).

#### 7.7 Prevalence and Treatment of Acute Respiratory Infections

Acute Respiratory Infection (ARI) and diarrhea are two major causes of morbidity and mortality among children in Bangladesh. Protecting children from them—by controlling the spread of ARI and diarrhea and offering appropriate treatment to those children who suffer from them—are a major concern of health services in Bangladesh, and thereby of the NIPHP. Both the prevalence of the diseases and the treatments sought and received, among children under five years of age, were examined in the 2001 UFHP Evaluation survey to obtain the data needed to evaluate performances of NIPHP/UFHP supported NGOs with respect to the disease

Common symptoms associated with ARI include fever, cough, and difficult or rapid breathing or chest indrawing. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths from respiratory infections.

As in the 1999–2000 BDHS, acute respiratory illness was defined as cough, and rapid or difficult breathing or chest in-drawing. Prevalence of the disease among children under five was assessed for the two-week period preceding the survey. The data were collected by asking mothers if any of their children under-five had had a respiratory illness during the two weeks before the survey. Children reported to have had any of the ARI symptoms were considered to have been ill with an ARI episode in the reference period. Rates of reported ARI prevalence are given in Table 7.13A. These prevalence rates are inherently imprecise since they are based on a mother's subjective assessment of the illness. In the UFHP areas, 42.4 percent of under-five children were reported to have been ill with fever in the two weeks before the survey, while 17.8 percent of children were diagnosed as having suffered an ARI episode in the same period.

With respect to the prevalence of either ARI or fever, there were little or no variations in the UFHP project areas by type of urban areas. The variations were also slight between the project (42 percent) and non-project (39 percent) areas in reporting of fever. However, the prevalence of ARI appeared remarkably lower for children in the non-project areas than in the project areas —only 10 percent compared to 18 percent for the project areas. It may be that the extent of differences was somewhat exaggerated, with the rate for non-project areas being an underestimate associated with large sampling fluctuations, based on small number of cases.

In general, children were more likely to suffer an ARI episode when they were younger. The only exception to the general pattern was that children age below 6 months were relatively less vulnerable to ARI attacks than were the children age 6 to 11 months (Table 7.13A). Nineteen percent of children under 6 months were reported to have suffered an ARI episode in the two weeks before the survey, compared to 27 percent of children age 6 to 11 months, the group of children found most susceptible to ARI. From age 12 months (one year) onward, prevalence of ARI gradually diminished as age rose, reaching a low of 10.3 percent for children in the oldest age group, 48 to 59 months. Children also, were more likely to be ill with an ARI episode if they were of higher birth order than of lower birth order. Thus, 14-15 percent of children of birth-order 3 or less were found ill with an ARI episode in the two weeks before the survey, compared to 21 percent of those with the highest birth-order, 6+. There were practically no variations in the prevalence of ARI illness between male (18.4 percent) and female (17.3 percent) children.

The differentials by mother's education were prominent. Children were at lower risk of getting ARI if their mothers were educated than not educated or if their mothers had more education than less education. While the proportion of children suffering an ARI episode was highest 21.5 percent among mothers with no education, it was 17.1 percent or even lower for those with at least some secondary education and only 8.0 percent for those children whose mothers had higher secondary education, showing a gradual drop in the prevalence of ARI with every increase in the mothers' educational level.

The differentials in the reporting of fever by children's age, birth-order and sex, and their mothers' education had the same patterns as those for ARI illness.

Tables 7.13B presents the sources of treatment for children under five years old who had ARI symptoms. As reported, about 30 percent of children with symptoms of ARI were taken to a health facility/provider, in the UFHP areas. Overall, UFHP providers provided care to only a very small proportion — only 1.7 percent — of children with symptoms of ARI. This proportion was roughly the same in 1998 (1.3 percent).

Among the three types of UFHP areas, children, when ill with ARI, were relatively less likely to be taken to a health facility/provider for treatment in the Thana (22.9 percent) or District Municipality (27 percent) areas than in the City Corporation (35 percent) areas. A higher proportion of children (40.5 percent) in non-UFHP areas were taken to a medical facility than children in UFHP areas (30.5 percent) (Figure 7.8). The rates of treatment from all sources, however, were similar in UFHP (77.3 percent) and non-UFHP (79.8 percent) areas. The main sources of treatment in UFHP areas were pharmacies, private doctors/ clinics and public hospitals. The pattern of treatment was similar in non-UFHP areas.

Table 7.13A Prevalence and treatment of symptoms of ARI or ARI plus fever

Percentage of children under five years of age who had a cough accompanied by short, rapid breathing (symptoms of ARI), and percentage of children who had fever in the two weeks preceding the survey, and percentage of children with

symptoms of ARI for whom treatment was sought from a health facility or provider, by background characteristics

Background characteristic	Percentage of children with symptoms of ARI	Percentage of children with fever	Number of children	Among children with symptoms of ARI or ARI plus fever Percentage for whom treatment was sought from a health facility or provider	Number of Children with ARI or ARI plus fever
Age in months	10.1	45.0	104	26.0	27
<6	19.1	45.0	194	26.0	37
6-11	26.6	51.4	321	39.3	85
12-23	22.2	46.6	566	29.5	126
24-35	18.5	43.6	548	24.1	101
36-47	14.2	37.2	516	19.8	73
48-59	10.3	35.4	543	29.7	56
Sex					
Male	18.4	42.6	1,338	32.0	246
Female	17.3	42.2	1,350	28.9	233
Birth Order					
1	15.7	39.2	1,190	36.9	187
2-3	14.7	40.4	1,636	35.3	240
4-5	17.5	46.4	497	18.0	87
6+	21.1	50.3	256	23.3	54
Residence					
City	18.2	42.7	1,264	35.0	230
District	17.3	42.0	1,151	27.2	199
Thana	18.4	42.5	273	22.9	50
Mother's education					
No education	21.5	43.7	945	19.9	204
Primary	18.6	46.9	685	26.6	127
Secondary	17.1	42.1	777	46.4	133
Higher Secondary	8.0	30.1	187	66.9	15
University/College	0.0	22.4	93	_	0
Total UFHP	17.8	42.4	2,688	30.5	479
Total non-UFHP	10.0	39.0	892	40.4	89

ARI = Acute Respiratory Infection; NA = Not applicable

Note: The results in the last two columns of this were calculated for children with symptoms of ARI. Because of the questionnaire design, children with ARI and/or fever were asked about source of treatment. The table above represents children with ARI, but they may have had fever at the same time and therefore the source for treatment may actually refer to fever and not to ARI.

<sup>&</sup>lt;sup>1</sup>Excludes pharmacy, shop and traditional practitioner

Table 7.13B Source of Treatment for children with ARI

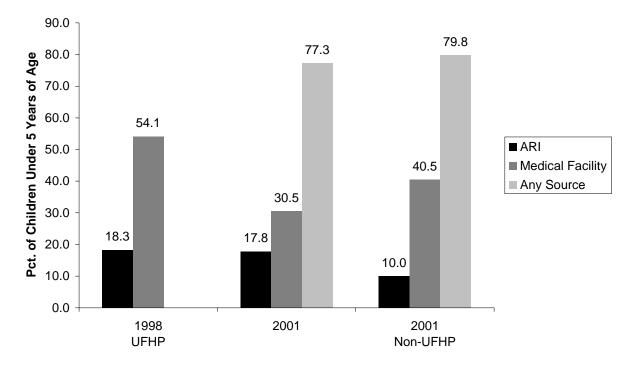
Percent distribution of children under five years old who were ill with a cough accompanied by short, rapid breathing (ARI) during the two weeks preceding the survey by source of treatment, UFHP and non-UFHP areas

	City	District	Thana	UFHP total	Non-UFHP
HOME					
Medical person at home	0.6	0.0	0.0	0.3	1.1
Non-medical person at home	1.0	0.0	0.0	0.5	0.0
PUBLIC SECTOR	1.0	0.0	0.0	0.5	0.0
Hospital/medical college	5.3	7.0	0.0	5.4	7.9
Family Welfare Centre	0.0	0.0	0.8	0.1	0.0
Thana Health Complex	0.0	0.0	2.7	0.1	1.1
MCWC	0.0	2.3	0.0	0.9	1.1
Rural dispensary/Community clinic Satellite clinic/ EPI outreach site FWA	0.0	2.3	0.0	0.5	1.1
Health assistant					
City Corporation Health facility NIPHP NGO	0.0	0.0	0.0	0.0	3.4
Static clinic	1.1	0.0	0.5	0.6	0.0
Satellite clinic	2.3	0.0	0.1	1.1	0.0
OTHER NGO					
Hospital	1.0	0.0	0.1	0.5	3.4
Clinic	3.3	0.0	0.0	1.6	2.2
PRIVATE MEDICAL SECTOR					
Private clinic/doctor	21.4	17.9	18.6	19.7	20.2
Traditional doctor	10.2	12.3	21.8	12.3	3.4
Homeopathic doctor	5.7	13.0	6.1	8.8	10.1
Pharmacy	20.9	26.3	28.2	23.9	24.7
OTHER	0.6	0.9	1.1	0.8	1.1
Missing	1.0	0.0	0.0	0.5	0.0
Did not seek advice/treatment	25.5	20.3	19.9	22.7	20.2
Total	100.0	100.0	100.0	100.0	100.0
Number of Women	230	199	50	479	89

Note: The results in this table were calculated for children with symptoms of ARI. Because of the questionnaire design, children with ARI and/or fever were asked about source of treatment. The table above represents children with ARI, but they may have had fever at the same time and therefore the source for treatment may actually refer to fever and not to ARI.

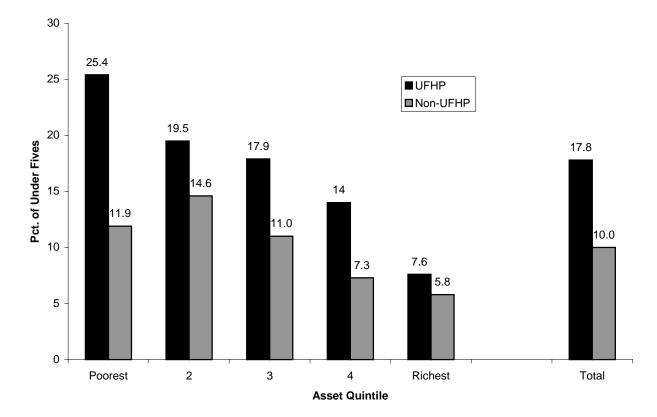
ARI prevalence was approximately the same -18 percent of children in the 2 weeks preceding the survey - in both 1998 and 2001 (Figure 7.8). The proportion of children in UFHP areas who were taken to a medical facility, however, was much lower in 2001, falling from 54.1 percent to 30.5 percent.

Figure 7.8 Trends in ARI prevalence and treatment seeking behavior, 1998 and 2001



There is some indication that children in the lower asset quintiles are more susceptible to illness than children in higher asset quintiles (Figure 7.9). In UFHP areas, approximately one-fourth of children in the lowest asset quintile were reported to have signs of ARI. This compares with 7.6 percent of children in the highest asset quintile. In non-UFHP areas, ARI prevalence is considerably lower, but children in the lowest asset quintile are still about twice as likely as children in the highest asset quintile to have symptoms of ARI.

Figure 7.9 ARI Prevalence, Last 2 Weeks, by Asset Quintile



## **Knowledge of proper ARI treatment**

Table 7.13C shows the distribution of knowledge of proper ARI treatment. A child should be taken to a health facility when he/she has symptoms of ARI, namely, cough with rapid or difficult breathing and/or chest indrawing. At least a doctor should be consulted if it is not possible to take the child to a health facility for any reason. In the UFHP areas, over 60 percent of respondents had the knowledge that a child with symptoms of ARI be taken to a health facility. 'Would consult a doctor for treatment or advice of the illness' was also mentioned by half of the respondents. Few or almost none of the respondents mentioned any other treatments of ARI in children. Between the project and non-project areas, there were little or no variations in knowledge of ARI treatment. However, in the project areas, mothers were found less likely to have the knowledge that a child when ill with ARI should be taken to a health facility in City Corporation areas than in the District or Thana Municipality areas. This may appear as a surprising finding. Even so, it could be due to that parents in City Corporation areas were more likely to consult a doctor first before taking a child to a health facility, compared to those of the smaller urban centers. In the City Corporation areas, 61.8 percent of respondents mentioned consulting a doctor when their children become sick with ARI, compared to 38-40 percent of those in the District or Thana Municipality areas.

Knowledge of proper treatment of ARI in children was associated with education as well as with households' sources of drinking water. Only 60 percent of respondents who had no education mentioned that a child should be taken to a health facility when he/she is sick with ARI. The percentage jumped to 67 percent with those just having a primary education and then to 75 percent with those having a college/university education. Note that the percentage dropped with respondents having a secondary education, although this could be explained in that they were relatively more dependent on doctors than on health facilities. By sources of drinking water, respondents from households drinking water from piped water were more likely to know of proper treatment of ARI in children, compared to those from households drinking other than piped water.

Table 7.13C Knowledge of Proper ARI Treatment

Percent of women who know proper treatment for ARI by selected background characteristics, UFHP areas

					Wait for a					
Background	Take child	Consult a		Treat with	few days for	Consult	Do		Don't	
Characteristic	to health	Doctor	Pharmacy	Medicine in	improve-	Neighbor/	Nothing	Other	Know	Number
	facility			Home	ment	Relative				
Residence										
City	56.0	61.8	1.7	6.6	0.7	0.5	0.1	17.5	1.2	1,091
District	70.6	40.3	3.5	3.9	0.7	0.3	0.0	16.7	0.5	1,007
Thana	72.2	38.2	2.4	5.1	0.3	0.3	0.0	20.7	0.3	224
Highest education level										
No education	59.5	47.4	3.1	5.4	0.4	0.4	0.1	23.0	1.1	806
Primary	67.3	47.5	3.1	4.8	0.6	0.2	0.0	18.4	1.0	580
Secondary	65.4	52.7	2.1	4.9	0.3	0.4	0.0	13.5	0.6	683
Higher Secondary	61.9	61.0	1.5	7.5	0.8	0.9	0.0	9.1	0.0	165
University/College	74.6	54.0	0.1	5.7	0.0	0.0	0.0	6.8	0.0	88
Source of drinking water										
Piped	64.3	52.4	1.9	7.3	0.2	0.5	0.0	14.9	1.4	786
Protected well	63.9	49.2	2.8	4.2	0.6	0.4	0.1	18.6	0.5	1,509
Open Well	41.8	37.0	21.1	0.0	0.0	0.0	0.0	79.3	0.0	6
Surface	52.1	52.2	3.1	3.1	0.0	0.0	0.0	10.0	0.0	19
Other	77.3	22.7	0.0	0.0	0.0	0.0	0.0	34.1	0.0	2
Total UFHP Area	63.9	50.2	2.6	5.2	0.4	0.4	0.1	17.5	0.8	2,322
Non-UFHP Area	62.5	52.3	4.6	3.2	0.9	0.1	0.0	11.6	0.4	788

Note: Percentages by background characteristics for UHFP areas only.

## 7.8 Vitamin A Supplementation

In Bangladesh, vitamin A deficiency is the major cause of preventable childhood blindness and a major contributing factor to the severity of several other childhood causes of morbidity and mortality. Vitamin A also has been essential to the proper functioning of the body's immune system. Deficiency of this crucial micronutrient can be avoided by giving children supplements of vitamin A by capsule, usually every six months. Since 1973, the government of Bangladesh has been conducting a national, high-dose capsule-distribution program for all children age 6–71 months. The capsules are distributed twice a year (in April-May and October-November) by government and non-government organizations. In addition, during specified National Immunization Days, vitamin A capsules are given to children age 1–5 years.

As in the UFHP Baseline Survey and the BDHSs, mothers of under-five children were asked if their under-five children had taken a vitamin A capsule in the past six months. As reported by mothers in the UFHP areas, 70.6 percent of under-five children were covered with vitamin A capsule, receiving at least one capsule in the six months preceding the survey (Table 7.14). This is a small improvement since the Baseline Survey in 1998, when 65.2 percent of children received a vitamin A capsule. In the UFHP areas, there were only small variations in the coverage of children by vitamin A capsule by type of urban centers, City Corporations (70 percent), District Municipalities (72 percent) and Thana Municipalities (71 percent). The difference in coverage between UFHP areas and non-UFHP areas was only 2.8 percentage points.

Table. 7.14 Percentage of children receiving Vitamin A in the last 6 months

Percentage of children (most recent birth in last 5 years) who were given vitamin A in the last 6 months by city type, UFHP/ non-UFHP

Jr - , -					
Region	Yes	No	Don't Know	Total	Number
City	69.7	27.1	3.2	100.0	1,053
District	71.6	27.0	1.4	100.0	971
Thana	70.5	26.6	2.9	100.0	216
Total UFHP	70.6	27.0	2.4	100.0	2,240
Non-UFHP	73.4	25.0	1.6	100.0	743

Vitamin A consumption in the 6 months preceding the survey by children under 5 years of age is also positively associated with socioeconomic status of the household (Figure 7.10). In UFHP areas, the proportion of children receiving vitamin A was 14 percentage points lower in the lowest asset quintile (62.4 percent) than in the highest asset quintile (76.7 percent). A similar positive relationship between socioeconomic status and vitamin A consumption was not apparent in non-UFHP areas.

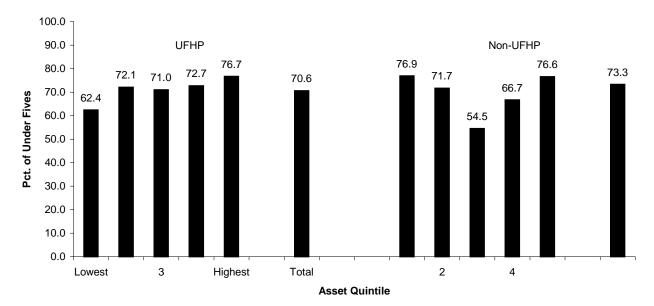


Figure 7.10 Vitamin A Received in Last 6 Months, Age Under 5 Years, UFHP and non-UFHP Areas

# Knowledge of Importance of Vitamin A

Despite considerably high coverage of children of vitamin A capsule, achieved, knowledge regarding the importance of the capsule remained low in the survey population (Table 7.15). In the UFHP project areas, only slightly over a quarter of respondents could mention that Vitamin A prevents night blindness and only 15 percent that it provides resistance to infections, along with 42 percent making a generalized statement that it improves health. There were no marked variations in knowledge of importance of vitamin A capsule either between project and non-project areas or within by type of urban centers. However, association between knowledge regarding the capsule and the education of women was clearly evident in the data. While only 9.3 percent of respondents having no education could mention of vitamin A capsule preventing night blindness, the rate sharply rose with every increase in the respondents' educational level, reaching 18 percent with those having a primary education, 37 percent with those having a secondary education, and nearly 70 percent with those having a higher secondary education and finally, 80 percent with those having a college/university education.

Table 7.15 Knowledge of importance of Vitamin A

Percentage of women who know why Vitamin A is given to children by background characteristics, UFHP/ non-UFHP areas

Background characteristic	Prevent Night Blindness	Prevent Resistance to Infections	Improve Child Health	Other	Don't Know	Total	Number
Region							
City	28.1	11.5	41.7	7.2	25.1	100.0	1,091
District	26.0	17.7	43.0	3.1	24.0	100.0	1,007
Thana	20.0	16.0	35.3	4.9	34.9	100.0	224
Mother's education							
No education	9.3	13.2	47.7	5.0	34.7	100.0	806
Primary	17.9	16.0	45.4	6.7	25.7	100.0	580
Secondary	37.2	16.4	35.4	4.4	20.8	100.0	683
Higher Secondary	66.7	9.0	24.6	4.8	10.7	100.0	165
University/College	79.9	15.1	21.7	4.6	6.1	100.0	88
Total UFHP Area	26.4	14.6	41.7	5.2	25.6	100.0	2,322
Non-UFHP Area	30.3	14.8	38.7	4.1	23.7	100.0	778

#### 7.9 Childhood Diarrhea

#### Prevalence of Diarrhea

Like prevalence of ARI illness, prevalence of diarrhea was assessed for the two-week period preceding the survey. The data were gathered by asking mothers of under-five children if any of their under-five children had diarrhea in the reference two-week period. Table 7.16 shows the prevalence rates of diarrhea in under-five children, as reported by the mothers. Diarrhea is a seasonal disease; therefore the given rates may not be comparable with those of the other surveys if conducted during a different season of the year than the reporting survey. About 5.7 percent of children under five years of age were reported to have had diarrhea in the two weeks preceding the survey in the UFHP areas. There were actually no variations in the prevalence of diarrhea in children between the project and non-project areas. Likewise, there were almost no variations by type of urban centers in the UFHP areas, namely, City Corporation, District Municipality and Thana Municipality. Differentials were also non-existent in the prevalence of diarrhea between male and female children.

Diarrhea was more common among children age 6 to 23 months than among older or younger children. Differentials in the prevalence of diarrhea by age of children were shown to have similar patterns in the UFHP Baseline survey as well as in the BDHS. As stated in the 1999–2000 BDHS final report, "this pattern is believed to be associated with increased exposure to the illness as a result of both weaning and the greater mobility of the child as well as to the immune system of children in that age group." Remarkable differentials in the prevalence of diarrhea in children by mothers' education were evident showing children at greater risks of the disease if their mothers had no education or an education only up to the primary level than if they had more education. Surprisingly, more children were reported to have had an episode of diarrhea in the two weeks before the survey in households drinking water piped into the house than in households drinking water from natural sources (surface).

Approximately 7.2 percent of children in the lowest asset quintile were reported to have diarrhea, followed by 8.5 percent of children in the second lowest asset quintile, 5.8 percent of children in the middle asset quintile, and 2.4 percent of children in the second highest and highest asset quintiles (Figure 7.11). Perhaps more importantly, the proportion of children receiving ORS or laban gur was roughly equal across the lower four quintiles, and universal in the highest asset quintile.

Table 7.16 Prevalence of diarrhea

Percentage of children under five years with diarrhea in the two weeks preceding the survey, by background characteristics, UFHP/ non-UFHP areas

Background characteristic	Diarrhea in the two weeks	Number		
	preceding the survey	of Children		
Child's age in months				
<6	0.1	194		
6-11	9.1	321		
12-23	7.2	566		
24-35	5.5	548		
36-47	5.5	516		
48-59	4.3	543		
Child's sex				
Male	5.8	1,338		
Female	5.5	1,350		
Residence				
City	5.9	1,264		
District	5.4	1,151		
Thana	6.0	273		
Mother's education				
No education	6.3	945		
Primary	8.3	685		
Secondary	3.9	777		
Higher Secondary	2.7	187		
University/College	0.0	93		
Source of drinking water				
Piped	5.3	889		
Protected well	5.9	1,768		
Open well	0.0	9		
Surface	4.2	20		
Other	0.0	2		
Total UFHP Area	5.7	2,688		
Non-UFHP Area	5.7	892		

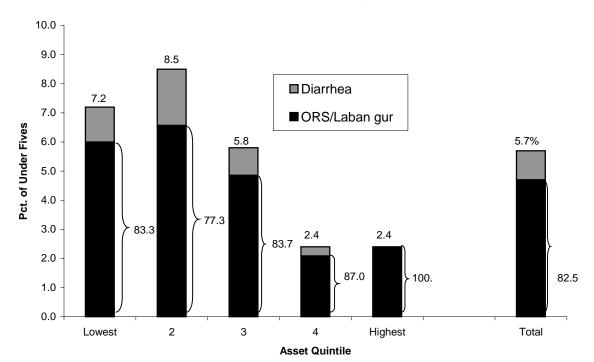


Figure 7.11 Diarrhea Prevalence and Treatment with ORS/Laban gur, by Asset Quintiles, UFHP Project Areas

#### **Treatment of Diarrhea**

In the UFHP areas, 20 percent of the under five children with diarrhea in the two weeks preceding the survey were reported to have been taken to a health facility for treatment or consultation, as shown in Table 7.17. Eight out of every 10 children with diarrhea were given a solution made from ORS packets, while 17 percent were given a recommended home fluid (RHF, or *laban gur* solution). Seven out of every 10 children with diarrhea were given water and a one-third other liquids. Although treatment of diarrhea in children, with some sort of oral rehydration therapy, was widespread, nearly 50 percent of children with diarrhea were given some kind of pill or syrup in UFHP areas. This finding indicates that many parents were not yet aware that children with diarrhea do not require any medication other than oral rehydration treatment, unless the disease turns out to be a dangerous/serious type of diarrhea. About 5.5 percent children with diarrhea were given nothing, a potentially dangerous practice.

Among the three types of UFHP project areas, children with diarrhea were most likely to be taken to a health facility for treatment or consultation in City Corporation areas (26.4 percent), next most likely in District Municipality areas (15 percent) and least likely in Thana Municipality areas (8.6 percent). Between the project and non-project areas, children with diarrhea were much more likely to be taken to a health facility in non-project areas than in project areas—47 percent compared to only 20 percent.

Younger than older children were more likely to be taken to a health center when they had diarrhea, as were the children of the educated or more educated mothers than those of the uneducated or less educated. There were also significant differentials by sources of drinking water. Children with diarrhea were much more likely to be taken to a health facility in the households in which drinking water was piped into the house than in the households drinking water from any other sources. Male children were more likely than female children to be taken to a health facility when they were ill with diarrhea.

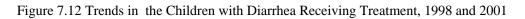
Rates of treatment of diarrhea with solutions made from ORS packets in children, had little or no variations between project and non-project areas, or by type of urban centers in the project areas. The rate of treatment by

either ORS or recommended home solution was 80.4 percent, identical in both UFHP and non-UFHP areas. Although the variations were usually not marked by the other background characteristics, it remained apparent in the data that children with diarrhea were relatively less likely to receive treatment with solutions made from ORS packets if they were of age 11 months or younger, if their mothers had no education or had only a nominal education (worth primary level), if they were from households drinking other than piped water, or if they were a girl. In contrast, treatment of diarrhea with recommended home fluids, was found more common in non-project than project areas, while in the project areas, it was most common in Thana Municipality areas, next most common in District Municipality areas and least common in City Corporation areas. Treatment of diarrhea with home fluids was also found more common generally for younger than older children and more common for female than male children.

Children with diarrhea were more likely to receive water or other fluids in non-project areas than in project areas, and in the project areas, more in District Municipality areas than in the Thana Municipality or City Corporation areas. When distinguished by other background characteristics, the likelihood of children receiving water and other liquids during their illness with diarrhea was found greater if their mothers were educated than not educated, if more educated than less educated, if they were from households drinking piped water than not drinking piped water or if they were in an older age group than in an younger age group. Male and female children were, however, about equally likely to receive water/other liquids during illness with diarrhea.

The likelihood of children being given pill/syrup to treat diarrhea varied greatly by type of urban centers in the UFHP areas. Treatment with pill/syrup of diarrhea in children was much more common in City Corporation areas than in District Municipality areas and was much more common in District Municipality areas than in Thana Municipality areas. Between the project and non-project areas, treatment with pill/syrup was more common in non-project than project areas. Children were more likely to be given pill/syrup to treat diarrhea in them if they were in the age range of 6-23 months; if their mothers were more educated, or if they were from households drinking piped water.

Figure 7.12 provides information on trends in ORT use from 1998 to 2001 in UFHP areas. During that time, use of packet ORS increased by 9 percentage points in UFHP areas, from 71.3 percent to 80.4 percent of children with diarrhea. Overall ORT use increased from 77.0 percent to 82.5 percent of children with diarrhea. Treatment with *laban gur* remained much the same between the surveys, at approximately 17 to 18 percent of children with diarrhea.



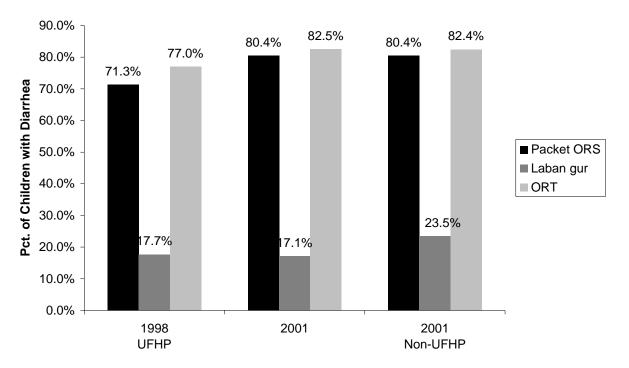


Table 7.17 Diarrhea treatment

Percentage of children under five years who had diarrhea in the two weeks preceding the survey taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, according to background characteristics.

	Percentage	Oral rehy	ydration thera	py (ORT)	Other treatments						
Background characteristic	taken to a health provider <sup>1</sup>	ORS packets	RHF at home	Either ORS or RHF	Water	Other Liquid	Pill, Capsule or syrup	Injection	Home remedies/ Herbal Medicines	None	Number of children
Child's age in months <6 6-11 12-23 24-35 36-47 48-59	0.0 29.4 23.0 13.6 15.0 16.9	0.0 67.6 81.5 79.6 80.7 95.9	0.0 8.9 10.1 28.0 15.7 27.2	0.0 67.6 81.5 88.6 80.7 98.2	79.1 57.4 78.4 78.0 72.0 63.0	0.0 21.3 24.1 37.6 57.8 29.3	0.0 52.8 64.1 36.0 42.9 39.8	0.0 0.0 0.9 4.8 0.0 0.0	20.9 9.1 6.7 0.0 0.0 4.0	0.0 15.7 3.0 4.5 4.2 0.0	0 29 41 30 29 23
Child's sex Male Female	22.5 17.1	85.8 74.6	9.0 25.6	85.8 79.0	67.8 74.0	37.5 29.0	45.8 51.5	1.8 0.5	5.1 3.2	4.3 6.7	78 74
Residence City District Thana	26.4 15.0 8.6	80.8 79.9 80.3	13.7 19.4 23.8	80.8 83.7 85.7	61.5 83.8 63.3	30.0 39.5 25.3	59.1 40.9 29.9	0.0 2.3 2.2	5.5 3.2 2.0	8.6 3.2 0.0	74 62 16
Mother's education No education Primary Secondary Higher Secondary	7.7 29.6 24.4 26.7	70.3 87.3 87.3 79.4	20.6 19.5 0.6 47.4	72.6 88.8 87.3 100.0	65.8 73.0 71.4 100.0	26.3 30.9 48.8 47.4	39.2 50.8 54.2 100.0	3.0 0.0 0.0 0.0	4.1 4.5 4.5 0.0	9.3 4.9 0.0 0.0	60 57 30 5
Source of drink water Piped Protected well Open well	28.8 16.0	88.1 77.5	14.5 17.6	88.1 79.9	85.4 63.9	41.8 29.8	69.7 38.5	0.0 1.7	5.8 3.5	2.6 6.8	47 104
Surface Total UFHP Area	0.0	0.0 80.4	100.0 17.0	100.0 82.5	100.0 70.8	0.0 33.3	100.0 48.5	0.0 1.2	0.0 4.2	0.0 5.5	1 152
Non-UFHP Area	47.1	80.4	23.5	82.4	74.5	39.2	56.9	0.0	9.8	3.9	51

Note: ORT includes solution prepared from oral rehydration salt (ORS) packets, recommended home fluids (RHF/sugar-salt water solution/laban-gur sharbat), or increased fluids. Excludes pharmacy, shop and traditional practitioner.

# **Sources of Diarrhea Treatment**

The share of UFHP providers in diarrhea treatment was less than one percent of children with diarrhea (Table 7.18), although approximately half of all children with diarrhea were not taken for treatment to a health provider. The share is was nearly identical to the 0.9 percent share of children with diarrhea in the 1998 Baseline Survey. Private medical sector facilities were the most common source of care-seeking of diarrhea in children. For 44 percent of children with diarrhea in the two weeks before the survey in the project areas, treatment was sought for the illness from those facilities. The most commonly used private sector facilities were pharmacies (19 percent) and private clinics/doctors (15 percent), followed by traditional doctors (8 percent). However, dependence on them varied by type of urban areas. Use of traditional doctors for treatment of diarrhea in children was relatively more common in Thana Municipality areas than in District Municipality or City Corporation areas, while the reverse was true for private clinics/doctors. Again, pharmacies were relatively more commonly used for treatment of diarrhea in children in City Corporation areas than in District or Thana Municipality areas, while homeopath doctors were mentioned as used mostly in Thana Municipality areas. As in the project areas, private medical facilities were the most common source of treatment of diarrhea in children in non-project areas. However, use of public sector facilities, particularly hospitals/medical colleges, was much more prominent in non-project areas. Treatment of diarrhea was sought from public sector facilities for 16 percent of children with diarrhea in non-project areas compared to only a very small 3 percent of those in project areas.

<u>Table 7.18 Source of diarrhea treatment</u>
Percentage distribution of source of treatment for diarrhea in the two weeks preceding the survey by division and UFHP/non-UFHP

Source of Treatment	City	District	Thana	UFHP	Non-UFHP
Home	1.8	2.8	2.6	2.3	0.0
Medical Person at home	1.8	0.0	2.6	1.2	0.0
Non-medical person at home	0.0	2.8	0.0	1.1	0.0
Public Sector	3.2	2.3	2.1	2.7	15.7
Hospital/Medical College	3.2	2.3	0.0	2.5	7.8
Family Welfare Center	0.0	0.0	0.0	0.0	2.0
MCWC	0.0	0.0	0.0	0.0	3.9
Rural Dispensary/	0.0	0.0	0.0	0.0	2.0
Community Clinic					
Health Assistant	0.0	0.0	2.1	0.2	0.0
UFHP NGO	1.7	0.0	0.0	0.8	0.0
Satellite Clinic	1.7	0.0	0.0	0.8	0.0
Saterite Clinic	1.7	0.0	0.0	0.8	0.0
Private Medical Sector	52.1	33.1	44.5	43.6	56.9
Private clinic/Doctor	19.7	12.7	3.9	15.2	31.4
Traditional Doctor	7.2	6.1	20.2	8.1	0.0
Pharmacy	25.2	12.9	10.6	18.7	15.7
Homeopathic Doctor	0.0	1.4	9.8	1.6	9.8
Other	0.0	0.7	0.0	0.3	0.0
Not taken for treatment/provider	41.2	61.1	50.7	50.3	27.5
130 taken for treatment provider	71.2	01.1	30.7	30.3	21.5
Total	100.0	100.0	100.0	100.0	100.0
Number of children	74	62	16	152	51

### Feeding Practices during Diarrhea

In order to know of feeding practices during the time the children had a diarrheal episode, mothers of children with diarrhea in the two weeks preceding the survey were asked whether the children when ill with diarrhea were given the same amounts of foods and drinks as are they were usually given or were they given more or less than the usual amounts of foods and drinks. As shown in Table 7.19, in the project areas, more than a half (55.3 percent) of children with diarrhea in the two weeks preceding the survey were given more than the usual amount of fluids, while 26.6 percent were given the usual amount of fluids and a substantial minority, 18.1 percent, received less than the usual amount of fluids. It is dangerous practice to give a child a reduced amount of fluids during diarrhea when he/she needs more fluids and more frequent feedings than is he/she usually given. There were only small differentials in the practice of feeding less fluids to children during diarrhea among the different subgroups of children classified by background characteristics, but some are worth mentioning. The practice of giving a reduced amount of fluids was relatively less common among educated than uneducated mothers, while was it relatively more common among mothers in the City Corporation and Thana Municipality areas than in District Municipality areas. The likelihood of a child receiving increased amounts of fluids during diarrhea was linked to the education of his/her mother. More educated mothers were more likely to give more than the usual amounts of fluids to their children during a diarrheal episode.

The practice of providing solid foods to children during diarrhea was worse compared to that for fluids. In the UFHP areas, a large percentage of children with diarrhea, 42 percent, were reported to have been given less than the usual amount of foods during their illness, compared to only 32.3 percent of those receiving an increased amount of foods during the illness. As in the case of fluids, children with diarrhea were more likely to receive an increased amount of foods during the illness in District Municipality areas than in the City Corporation or Thana Municipality areas and more if their mothers were educated than uneducated or less educated. When children were distinguished by their households' sources of water, they were found more likely to receive increased amount of foods if they were from households drinking piped than not piped water. By age, children were more likely to receive increased amounts of foods when they were in the 12-13 month age group than when they were in the younger or older age groups.

Table 7.19 Feeding practices during diarrhea
Percent distribution of children under five years who had diarrhea in the two weeks preceding the survey, by amount of liquids and food offered compared with normal practice, by selected background characteristics, UFHP/ non-UFHP areas

		Amount of L	iquid Offered			Amount of l	Food Offered		Number
								Total	of
Background Characteristics	Same	More	Less	Total	Same	More	Less		Children
Clilly : 4									
Child's age in months	100.0	0.0	0.0	100.0	20.0	0.0	70.1	100.0	0
< 6 months	100.0	0.0	0.0	100.0	20.9	0.0	79.1	100.0	0
6-11	30.3	56.1	13.6	100.0	25.6	27.0	47.3	100.0	29
12-23	32.2	48.3	19.4	100.0	27.5	41.6	30.9	100.0	41
24-35	22.5	54.8	22.8	100.0	29.1	37.8	33.1	100.0	30
36-47	19.6	63.6	16.8	100.0	27.9	21.2	51.0	100.0	29
48-59	25.4	57.3	17.3	100.0	15.9	29.4	54.6	100.0	23
Child's sex									
Male	27.0	54.7	18.3	100.0	24.4	26.5	49.1	100.0	78
Female	26.2	55.9	17.9	100.0	27.2	38.4	34.4	100.0	74
Residence									
City	28.3	50.4	21.2	100.0	28.3	29.3	42.4	100.0	74
District	27.0	61.0	12.0	100.0	20.9	37.0	42.1	100.0	62
Thana	17.2	55.7	27.1	100.0	32.5	27.9	39.6	100.0	16
Mother's education									
No education	24.3	49.8	25.9	100.0	34.1	23.8	42.1	100.0	60
Primary	31.3	55.7	13.0	100.0	20.8	37.0	42.2	100.0	57
Secondary	22.1	62.5	15.4	100.0	22.8	36.5	40.7	100.0	30
Higher Secondary	28.1	71.9	0.0	100.0	0.0	54.9	45.1	100.0	5
Source of drinking water									
Piped	26.1	54.9	18.9	100.0	23.3	41.9	34.8	100.0	47
Protected well	27.0	55.9	17.1	100.0	27.1	28.2	44.8	100.0	104
Surface	0.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0	1
Total UFHP Area	26.6	55.3	18.1	100.0	25.7	32.3	42.0	100.0	152
Non-UFHP Area	39.2	52.9	7.8	100.0	29.4	33.3	37.3	100.0	51

## **Knowledge of Proper Treatment of Diarrhea**

In assessing knowledge of proper treatment of diarrhea in children, respondents were asked if they knew what to do when a child has diarrhea. As shown in Table 7.20, respondents almost universally mentioned ORS packet powder as a treatment of diarrhea in children. But only 40 percent could mention home solutions (*laban gur* sharbat) as a treatment of diarrhea in children. More than 60 percent mentioned taking a child to a health facility when he/she has diarrhea. Knowledge was, however, very low in the survey population that when a child has diarrhea, he/she should be given more fluids, more foods, and if currently breastfed, the breast milk. In the UFHP areas, only a quarter of respondents knew of more fluids and only 17 percent of more foods, to be given to a child during diarrhea, and only a small 7.7 percent of breast milk to be given if the child is currently breastfed. There were no marked variations in knowledge of treatment of diarrhea in children among any subgroups of the survey population by background characteristics.

Table 7.20 Knowledge of Proper Diarrhea Treatment

Percentage of women who know how to respond to diarrhea, according to background characteristics, UFHP/ non-UFHP areas

Dealeground abarostoristic	Give Home	ORS	Consult doctor/	Give	Give	Give	Other	Don't	Number
Background characteristic	ORS/	packets	health	More	More	Breast	Other	Know	of
	laban gur	puckets	facility	Liquid	Food	Milk		Timov	Women
1									
Residence									
City	41.4	94.0	61.8	28.1	17.4	8.4	13.8	0.6	1,091
District	38.0	94.6	66.7	23.7	17.8	7.2	18.8	0.2	1,007
Thana	43.0	93.0	65.0	16.3	11.0	6.2	22.6	0.4	224
Highest education level									
No education	39.9	93.4	62.8	15.1	8.3	2.0	12.7	0.3	806
Primary	39.2	93.2	63.9	26.5	14.2	5.9	19.9	1.0	580
Secondary	40.7	94.9	65.7	31.1	22.4	12.0	19.1	0.2	683
Higher Secondary	40.5	96.2	65.4	32.1	29.6	18.9	18.4	0.0	165
University/College	41.7	96.9	65.9	45.6	47.9	16.7	13.8	0.0	88
Source of drinking water									
Piped	41.6	94.9	61.4	29.1	19.8	9.3	18.5	0.3	786
Protected well	39.4	93.8	65.9	22.9	15.6	6.9	15.7	0.4	1,509
Open Well	42.2	0.00	0.0	15.9	0.0	0.0	63.0	0.0	6
Surface	30.9	91.3	68.5	23.5	11.8	4.4	15.7	0.0	19
Other	54.6	88.6	65.9	22.7	22.7	22.7	34.1	11.4	2
Total UFHP Area	40.1	94.2	64.2	25.0	17.0	7.7	16.8	0.4	2,322
Non-UFHP Area	40.7	95.8	63.0	24.2	19.0	8.5	18.0	0.3	778

Note: ORT includes solution prepared from oral rehydration salt (ORS) packets, recommended home fluids (RHF), or increased fluids.

<sup>&</sup>lt;sup>1</sup>Excludes pharmacy, shop and traditional practitioner.

#### **CHAPTER 8. INFANT FEEDING**

This chapter covers the survey findings regarding initiation of breastfeeding, patterns and duration of breastfeeding, and introduction of complementary weaning foods. Infant feeding affects both the mother and the child. It affects the child through his/her nutritional status, which in turn has an effect on the risk of dying. The mother is affected through the effect of breastfeeding on the period of postpartum infertility, and hence the length of the birth interval and fertility levels. These effects are influenced by both the duration and intensity of breastfeeding, and by the age when the child receives complementary foods and liquids.

#### 8.1 Initiation of Breastfeeding

Shown in Table 8.1 are the percentage of children who were ever breastfed and the percentage who started breastfeeding within a specific time after birth, among those born in the five years preceding the survey. As elsewhere in Bangladesh, children universally are breastfed in the UFHP areas. In response to a question, almost every child born there (99 percent) in the five years before the survey were reported to be or have been breastfed. Even so, although breastfeeding was universal among the children, only 21 percent of them were put to breast within one hour of birth, and about two-thirds within the first day of life. Initiation of breastfeeding immediately after childbirth is important for the benefits of both the mother and the infant. As soon as the infant starts suckling at the breast, the hormone oxytocin is released, resulting in uterine contractions that facilitate expulsion of the placenta and reduce the risk of postpartum hemorrhage. For the child, the early breast milk (colostrum) provides him/her the most needed natural immunity.

Infants were relatively more likely to be put to breast within one hour of birth or within the first day of life in the cities and district towns than in the thana towns, in the project areas. Between the project and non-project areas, the variations were slightly in favor of infants born in non-project areas than of those born in project areas. The likelihood of children receiving breast milk early had a clear relationship with their mothers' education. Educated mothers were more likely to put their baby early than the uneducated or less educated mothers. For example, only 17 percent of infants born to mothers who had no education or had only a primary level education were put to breast within one hour of birth, compared to 25 percent for mothers with a secondary education and 36 percent for those with a college/university education. Similar differentials were apparent in the proportions for infants put to breast within the first day of life. There were also variations seen in the timing of initiation of breast milk by place of birth and the type of personnel assisting the birth. Infants not born at home, and those whose birth was assisted by a health professional had a slightly greater chance of receiving breast milk early.

## 8.2 Exclusive Breatfeeding and Timing of the Introduction of Supplementary Foods

Breast milk is uncontaminated and contains all the nutrients needed by children in the first few months of life. Early supplementation, especially under unhygienic conditions, can result in infection with foreign organisms and lower immunity to disease. The timing of the introduction of food supplements also has an impact on the length of the mother's postpartum amenorrhea. Early initiation of supplementation results in earlier resumption of the mother's menstrual periods since supplementation reduces the infant's dependence on breast milk and the frequency of suckling. Mothers of children born in the five years preceding the survey were asked whether the youngest child was given plain water, other liquids, or solid or marshy (semisolid) foods at any time during the day or night before the interview. The results are shown in Tables 8.2A–8.2E.

Babies are breastfed for a long time in Bangladesh. Thus in the UFHP areas, nearly 90 percent of children were found being breastfed until age 24 months, and about 95 percent until age 12 months. But associated with this long duration of breastfeeding was the supplementation of breast milk with other liquids and foods beginning early in the life of a child. At the most, only 45 percent of newborns age less than 2 months in the UFHP areas were found to be exclusively breastfed, compared to at the least 55 percent of those already receiving supplementary foods or liquids (including 19 percent who were given only plain water). Consumption of any foods or liquids other than breast milk by an infant before four months of age puts him/her at the risks of

malnutrition and diseases, particularly diarrhea. Between the project and non-project areas however, early supplementation of breast milk was much less common in project areas than in non-project areas. In non-project areas, 75 percent of newborns age less than 2 months were found receiving supplementary foods or liquids (including plain water), compared to only 55 percent of those in project areas. Within the project areas, early supplementation of breast milk appeared much less common in Thana Municipalities than in cities and District Municipalities, with the proportion of newborns age less than 2 months receiving supplementary foods or liquids (including water) reported at 55-61 percent for the cities and district towns, compared to only about 25 percent for Thana Municipalities.

As was early introduction of supplementary foods/liquids for newborns/young infants, lack of complementary food was a problem among older children. From about six months of age, the introduction of complementary food is critical to meeting the protein, energy and micronutrient needs of children. In the UFHP areas, among children age 6–9 months, when supplements other than breast milk are considered necessary for adequate nutrition, 9 percent were reported to be receiving only water and 12 percent received other milk. Complementary foods were consumed by 70 percent of children 6–9 months of age. Within the project areas, lack of complementary food was relatively less common in district towns than in cities or Thana towns. However, compared to the project areas, the problem was seen slightly less common for children in non-project areas.

Table 8.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, percentage who started breastfeeding within one hour and within one day of birth, by background characteristics.

	Percentage ever breastfed	Percentage who started breastfeeding:		Number of Children
Background characteristic	0.01 0.100	Within 1 hour of birth	Within 1 day of birth <sup>1</sup>	J
Sex				
Male	98.5	20.9	67.3	1,164
Female	98.4	20.2	66.8	1,158
Residence				
City	98.3	20.1	67.4	1,091
District	98.5	22.4	67.5	1,007
Thana	99.0	14.5	63.8	224
Mother's education				
No education	98.8	15.6	57.3	806
Primary	99.0	17.6	66.8	580
Secondary	97.5	25.0	75.0	683
Higher Secondary	98.9	29.1	78.2	165
College/University	98.5	36.0	76.4	88
Assistance at delivery				
Health professional <sup>2</sup>	97.3	24.5	73.3	722
Traditional birth attendant	99.0	18.5	64.5	1,412
Other	99.5	20.5	62.6	164
No one	93.7	32.7	61.8	24
Place of delivery				
Health facility	96.8	25.6	75.9	558
At home	99.0	18.9	64.3	1,721
Other	100.0	17.3	61.9	31
Missing	90.1	35.5	84.1	12
Total UFHP	98.5	20.6	67.1	2,322
Total non-UFHP	97.7	22.4	64.4	777

Table is based on all births whether the children are living or dead at the time of interview.

Includes children who started breastfeeding within one hour of birth.

<sup>&</sup>lt;sup>2</sup>Doctor, nurse/midwife, or auxiliary midwife

Table 8.2A Breastfeeding status by age – City corporations

Percent distribution of youngest children under three years living with the mother, by breastfeeding status, City Corporations, UFHP only.

				Breastfeeding and				
						Comple-	Total	Number
Age in months	Not	Exclusively	Plain	Water-based	Other	mentary		of
	breastfeeding	breastfed	water only	liquids, juice	milk	foods		Children
<2	0.0	39.2	24.0	22.8	6.9	7.1	100.0	17
2-3	0.0	28.8	29.2	13.3	19.3	9.4	100.0	40
4-5	8.1	4.1	18.7	7.9	29.6	31.5	100.0	34
6-7	0.0	2.6	12.4	0.0	16.8	68.2	100.0	53
8-9	10.2	4.2	8.6	1.9	10.2	64.8	100.0	61
10-11	2.9	0.0	8.9	2.7	9.2	76.4	100.0	42
12-15	8.4	0.0	4.6	0.0	0.0	87.0	100.0	85
16-19	13.0	0.0	1.6	0.0	0.0	85.4	100.0	84
20-23	21.5	0.0	0.0	0.0	1.3	77.2	100.0	97
24-27	24.7	0.0	0.0	0.0	0.0	75.3	100.0	75
28-31	48.8	0.0	0.0	0.0	0.0	51.2	100.0	57
32-35	53.8	0.0	0.0	0.0	0.0	46.2	100.0	80
<6	3.0	21.6	24.3	13.1	20.8	17.2	100.0	91
6-9	5.5	3.4	10.4	1.0	13.3	66.4	100.0	115

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children classified as *breastfeeding and consuming plain water only* consume no supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and plain water, water-based liquids/juice, other milk and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the water-based liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

<u>Table 8.2B</u> Breastfeeding status by age – District Municipalities

Percent distribution of youngest children under three years living with the mother, by breastfeeding status District Municipalities, UFHP only.

			]	Breastfeeding ar				
						Comple-		Number
Age in months	Not	Exclusively	Plain	Water-based	Other	mentary	Total	of
	breastfeeding	breastfed	water only	liquids, juice	milk	foods		Children
<2	0.0	44.0	17.4	11.8	22.3	4.5	100.0	25
2-3	6.7	24.4	12.7	0.9	28.5	26.7	100.0	29
4-5	14.2	16.2	16.2	0.0	17.8	35.7	100.0	33
6-7	4.1	0.0	2.4	4.2	16.6	72.7	100.0	35
8-9	4.2	0.0	7.9	0.0	9.4	78.4	100.0	39
10-11	4.9	0.0	5.3	3.5	2.1	84.2	100.0	57
12-15	6.1	0.0	0.0	0.0	0.0	93.9	100.0	57
16-19	6.3	0.0	2.0	1.9	5.5	84.3	100.0	75
20-23	2.8	1.3	0.3	0.0	0.0	95.7	100.0	96
24-27	19.1	0.0	0.0	1.4	0.0	79.5	100.0	59
28-31	39.7	0.0	0.0	0.0	1.0	59.3	100.0	72
32-35	43.2	0.0	0.0	0.0	1.6	55.3	100.0	78
<6	7.7	26.8	15.4	3.6	22.6	23.9	100.0	87
6-9	4.2	0.0	5.3	2.0	12.9	75.7	100.0	74
Note: See note on	breastfeeding stat	us in Table 8.2	A				<u> </u>	

Table 8.2C Breastfeeding status by age – Thana Municipalities

Percent distribution of youngest children under three years living with the mother, by breastfeeding status, Thana Municipalities,

UFHP only.

-			]	Breastfeeding ar	:			
						Comple-		Number
Age in months	Not	Exclusively	Plain	Water-based	Other	mentary	Total	of
	breastfeeding	breastfed	water only	liquids, juice	milk	foods		Children
<2	0.0	76.4	9.2	11.8	0.0	14.5	100.0	4
2-3	0.0	34.9	15.2	0.9	15.9	22.8	100.0	6
4-5	0.0	28.5	19.6	0.0	8.0	22.2	100.0	6
6-7	12.5	5.2	22.1	4.2	0.0	48.4	100.0	9
8-9	9.3	0.0	13.4	0.0	12.4	77.4	100.0	9
10-11	7.8	3.8	3.8	3.5	0.0	72.2	100.0	11
12-15	8.9	0.0	4.4	0.0	0.0	86.7	100.0	20
16-19	3.0	0.0	0.0	1.9	0.0	93.4	100.0	16
20-23	8.1	0.0	0.0	0.0	0.0	91.9	100.0	21
24-27	15.0	0.0	0.0	1.4	0.0	85.0	100.0	12
28-31	34.4	0.0	0.0	0.0	0.0	65.6	100.0	20
32-35	45.2	0.0	0.0	0.0	0.0	54.8	100.0	15
<6	0.0	42.4	15.5	3.6	14.8	20.5	100.0	16
6-9	10.9	2.5	17.6	2.0	3.9	63.3	100.0	18
Notes Connets on			<u> </u>					
Note: See note on	breastreeding stat	us III Table 8.2F	1					

Table 8.2D Breastfeeding status by age - All UFHP

Percent distribution of youngest children under three years living with the mother, by breastfeeding status, UFHP areas

				Breastfeeding and consuming:				
					Comple-	Total	Number	
Not	Exclusively	Plain	Water-based	Other	mentary		of	
breastfeeding	breastfed	water only	liquids, juice	milk	foods		Children	
0.0	44.9	19.2	15.0	14.6	6.3	100.0	46	
2.6	27.6	21.7	8.3	22.6	17.2	100.0	75	
10.2	11.7	17.6	4.2	23.7	32.6	100.0	74	
2.6	1.9	9.6	1.9	15.9	68.0	100.0	97	
8.0	2.3	8.8	1.1	9.1	70.7	100.0	109	
4.4	0.4	6.5	2.8	5.9	80.0	100.0	110	
7.6	0.0	3.0	0.0	0.0	89.4	100.0	162	
9.2	0.0	1.6	1.2	2.4	85.7	100.0	175	
11.8	0.6	0.1	0.0	0.6	87.0	100.0	214	
21.6	0.0	0.0	0.6	0.0	77.8	100.0	147	
42.4	0.0	0.0	0.0	0.5	57.1	100.0	150	
48.2	0.0	0.0	0.0	0.7	51.1	100.0	173	
4.9	25.6	19.6	8.3	21.1	20.5	100.0	194	
5.5	2.1	9.2	1.4	12.3	69.4	100.0	207	
	0.0 2.6 10.2 2.6 8.0 4.4 7.6 9.2 11.8 21.6 42.4 48.2	breastfeeding         breastfed           0.0         44.9           2.6         27.6           10.2         11.7           2.6         1.9           8.0         2.3           4.4         0.4           7.6         0.0           9.2         0.0           11.8         0.6           21.6         0.0           42.4         0.0           48.2         0.0           4.9         25.6           5.5         2.1	breastfeeding         breastfed         water only           0.0         44.9         19.2           2.6         27.6         21.7           10.2         11.7         17.6           2.6         1.9         9.6           8.0         2.3         8.8           4.4         0.4         6.5           7.6         0.0         3.0           9.2         0.0         1.6           11.8         0.6         0.1           21.6         0.0         0.0           42.4         0.0         0.0           48.2         0.0         0.0           4.9         25.6         19.6           5.5         2.1         9.2	breastfeeding         breastfed         water only         liquids, juice           0.0         44.9         19.2         15.0           2.6         27.6         21.7         8.3           10.2         11.7         17.6         4.2           2.6         1.9         9.6         1.9           8.0         2.3         8.8         1.1           4.4         0.4         6.5         2.8           7.6         0.0         3.0         0.0           9.2         0.0         1.6         1.2           11.8         0.6         0.1         0.0           21.6         0.0         0.0         0.6           42.4         0.0         0.0         0.0           48.2         0.0         0.0         0.0           4.9         25.6         19.6         8.3           5.5         2.1         9.2         1.4	oreastfeeding         breastfed         water only         liquids, juice         milk           0.0         44.9         19.2         15.0         14.6           2.6         27.6         21.7         8.3         22.6           10.2         11.7         17.6         4.2         23.7           2.6         1.9         9.6         1.9         15.9           8.0         2.3         8.8         1.1         9.1           4.4         0.4         6.5         2.8         5.9           7.6         0.0         3.0         0.0         0.0           9.2         0.0         1.6         1.2         2.4           11.8         0.6         0.1         0.0         0.6           21.6         0.0         0.0         0.6         0.0           42.4         0.0         0.0         0.0         0.5           48.2         0.0         0.0         0.0         0.7           4.9         25.6         19.6         8.3         21.1           5.5         2.1         9.2         1.4         12.3	Not preastfeeding         Exclusively breastfed         Plain water only liquids, juice         Water-based liquids, juice         Other milk         mentary foods           0.0         44.9         19.2         15.0         14.6         6.3           2.6         27.6         21.7         8.3         22.6         17.2           10.2         11.7         17.6         4.2         23.7         32.6           2.6         1.9         9.6         1.9         15.9         68.0           8.0         2.3         8.8         1.1         9.1         70.7           4.4         0.4         6.5         2.8         5.9         80.0           7.6         0.0         3.0         0.0         0.0         89.4           9.2         0.0         1.6         1.2         2.4         85.7           11.8         0.6         0.1         0.0         0.6         87.0           21.6         0.0         0.0         0.6         0.0         77.8           42.4         0.0         0.0         0.0         0.5         57.1           48.2         0.0         0.0         0.0         0.7         51.1           4.9	Not preastfeeding         Exclusively breastfed         Plain water only         Water-based liquids, juice         Other milk         mentary foods           0.0         44.9         19.2         15.0         14.6         6.3         100.0           2.6         27.6         21.7         8.3         22.6         17.2         100.0           10.2         11.7         17.6         4.2         23.7         32.6         100.0           2.6         1.9         9.6         1.9         15.9         68.0         100.0           2.6         1.9         9.6         1.9         15.9         68.0         100.0           2.6         1.9         9.6         1.9         15.9         68.0         100.0           2.6         1.9         9.6         1.9         15.9         68.0         100.0           2.6         1.9         9.6         1.9         15.9         68.0         100.0           4.4         0.4         6.5         2.8         5.9         80.0         100.0           4.4         0.4         6.5         2.8         5.9         80.0         100.0           7.6         0.0         3.0         0.0         0.0<	

Note: See note on breastfeeding status in Table 8.2A

Table 8.2E Breastfeeding status by age - non-UFHP

Percent distribution of youngest children under three years living with the mother, by breastfeeding status, non-UFHP areas

			]	Breastfeeding an		Number		
Age in months	Not	Exclusively				Comple-	Total	of
	breastfeeding	breastfed	Plain	Water-based	Other	mentary		Children
			water only	liquids, juice	milk	foods		
<2	0.0	25.0	16.7	25.0	33.3	0.0	100.0	12
2-3	0.0	37.5	8.3	8.3	29.2	16.7	100.0	24
4-5	10.0	10.0	0.0	0.0	35.0	45.0	100.0	20
6-7	3.6	0.0	14.3	7.1	14.3	60.7	100.0	28
8-9	6.1	0.0	6.1	6.1	9.1	72.7	100.0	33
10-11	2.5	0.0	5.0	0.0	2.5	90.0	100.0	40
12-15	10.9	0.0	1.6	0.0	3.1	84.4	100.0	64
16-19	16.3	0.0	0.0	0.0	0.0	83.7	100.0	49
20-23	17.6	0.0	0.0	0.0	0.0	82.4	100.0	68
24-27	34.2	0.0	0.0	0.0	2.6	63.2	100.0	38
28-31	38.1	0.0	0.0	0.0	0.0	61.9	100.0	42
32-35	41.0	0.0	0.0	0.0	0.0	59.0	100.0	78
<6	3.6	25.0	7.1	8.9	32.1	23.2	100.0	56
6-9	4.9	0.0	9.8	6.6	11.5	67.2	100.0	61

Note: See note on breastfeeding status in Table 8.2A

#### 8.3 Duration of Breastfeeding

Estimates of both means and medians of duration of breastfeeding, given in Table 8.3, are based on the proportions being currently breastfed among the last born children in the three years before the survey. The current status data are used as opposed to retrospective data on length of breastfeeding of older children who are no longer breastfed because information on current status is usually more accurate than information based on mother's recall. The median length of any breastfeeding in the UFHP areas was 34 months, being lower for cities (30 months) than for the Thana and district towns (35 months). The mean duration and the median duration, were about equal in both the project and non-project areas.

There were only slight variations in the median duration of breastfeeding between male and female children. However, the median duration of breastfeeding was higher for children whose mothers had no education or had only a primary education, compared to those whose mother had more than a primary education.

In the UFHP areas, the median duration was less than a month for exclusive breastfeeding and less than three months for predominant breastfeeding. The median duration for exclusive breastfeeding and predominant breastfeeding were several months longer in non-UFHP areas than in UFHP areas.

Table 8.3 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, predominant breastfeeding among last-born children in the three years preceding the survey and living with the mother, by selected background characteristics.

	Median du	cation (months) of br	eastfeeding	
Background characteristic	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding <sup>2</sup>	Number of Children
Sex				
Male	33.0	0.9	2.7	1,109
Female	35.0	0.6	2.9	1,104
Residence				
City	30.0	0.6	3.3	1,032
District	35.0	0.7	2.2	966
Thana	35.0	2.1	4.1	216
Mother's education				
No education	37.0	0.6	4.0	752
Primary	38.0	1.4	2.3	558
Secondary	30.0	0.6	2.8	657
Higher Secondary	27.0	1.6	3.0	161
College/University	30.0	0.7	0.7	85
A11 1 11	24.0	0.7	2.0	2.214
All children – UFHP	34.0	0.7	2.8	2,214
Mean for all children	35.0	0.5	1.9	732
All-children- non-UFHP	35.0	2.5	5.1	99.3
Mean for all children	34.5	2.0	4.2	99.2

Note: Median and mean duration based on current status

Note: Percentages by background characteristics for UFHP areas only.

<sup>&</sup>lt;sup>1</sup>Excludes children who do not have a valid answer on the number of times breastfed

<sup>&</sup>lt;sup>2</sup>Either exclusively breastfed or received breast milk and plain water, water-based liquids, and/or juice only (excludes other milk)

#### CHAPTER 9. AWARENESS AND USE OF NIPHP CLINICS

UFHP supported NGOs operate two types of clinics—satellite clinics and static clinics. A primary objective of the 2001 UFHP Evaluation survey was to assess the awareness and use of those clinics and their services, specifically in the UFHP project areas. The intent was to find out how successful the UFHP efforts have been in diffusing information and knowledge about UFHP clinics, and thereby, in popularizing uses of their services. However, since the popularity of a clinic depends on the range and quality of services it offers, the data should also be useful in obtaining an overall assessment of the NIPHP performances in urban areas.

#### 9.1 Awareness of Temporary/Satellite Clinics

Awareness of satellite clinics was assessed by questioning respondents in the following way: "In some places, there is a temporary clinic set up for a day or part of a day in someone's house, a community building or in a school. Are you aware of any such clinics in this area? During the last three months, was there any such clinic in this area?" The last question was asked only when a respondent said she was aware of satellite clinics. This set of questions was asked in an identical manner in the 1998 Baseline Survey.

As shown in Table 9.1A, nearly six out of every ten ever married women in UFHP areas knew of satellite clinics in their area; and among those who knew, 85 percent had knowledge of at least one such clinic held in their areas during the last three months. Awareness of satellite clinics was mostly due to that of UFHP satellite clinics. An overwhelming majority of women aware of satellite clinics held in the last three months reported knowing of UFHP satellite clinics—58 percent compared to only 14 percent for government satellite clinics and only 26 percent for all the other satellite clinics taken together. Only a very small 3 percent could not provide the name or address of the satellite clinic(s) they said they knew of.

Overall, awareness of satellite clinics was highest for women in Thana Municipalities and lowest for District Municipalities. However, this overall pattern should not be taken as reflective of the variations in awareness of the specific type of satellite clinics by type of urban centers. Knowledge of UFHP satellite clinics was much more common among women in City Corporations than in District Municipalities or Thana Municipalities. In contrast, government satellite clinics were most known in Thana Municipalities, and least in cities, while awareness of all the other satellite clinics taken together was highest in District Municipalities, intermediate in City Corporations and lowest in Thana Municipalities.

Younger women appeared more likely to be aware of satellite clinics than older women, but there were no remarkable variations in awareness of satellite clinics among women either by their marital status or by their age. By education, women were more likely to know of satellite clinics if they were uneducated than educated or if less educated than more educated. However, the reverse of this relationship was seen in the case of awareness of UFHP clinics, showing educated or more educated women more likely to know of those clinics, except for women having a college/university education. Government satellite clinics were relatively more popular among women with a college/university education than among uneducated or more educated women.

Table 9.1B shows the knowledge and awareness of satellite clinics in the non–UFHP areas. Overall, awareness of any satellite clinics among women was lower in the non–UFHP areas than in the UFHP areas – 47 percent versus 58 percent. Although the differences were mostly due to the increased awareness of UFHP satellite clinics in the UFHP areas, the relative popularity of UFHP satellite clinics was almost as prominent in the non-UFHP areas as in the UFHP areas. In the Non–UFHP areas, 53 percent of women knowing of satellite clinics said they knew of UFHP satellite clinics, compared to only 12 percent for government clinics and only 33 percent for all the other satellite clinics taken together. Non–UFHP areas did not have much variation with the UFHP areas, with respect to the differentials in awareness of satellite clinics by the selected background characteristics.

Table 9.1A Knowledge and awareness of temporary/satellite clinics in UFHP areas

Percentage of women by aware of temporary/satellite clinic in her area and by awareness of types of clinic and whether the temporary/satellite clinic was held in the past three months by background characteristics, UFHP areas

	Awareness of	Number of	Clinic held in	Number of		Ty	pe of Tempo	orary/Satelli	te Clinic	
Background Characteristic	temporary/ satellite clinic	Women	last 3 months?	Women Knowing of Temporary Clinics	UFHP	Government	Other	Don't Know	Total	Number of Women Reporting Clinics in Last 3 Months
Age										
15-19	61.0	647	85.3	395	60.4	12.1	22.2	5.2	100.0	337
20-24	59.4	982	86.1	583	60.2	13.0	25.1	1.7	100.0	502
25-29	59.5	998	84.3	594	59.5	15.2	23.9	1.4	100.0	501
30-39	58.4	932	81.5	544	54.7	13.0	29.6	2.7	100.0	443
40-49	53.9	1,786	84.8	963	55.1	13.4	28.5	3.0	100.0	816
Marital status										
Currently Married	57.7	4,925	84.8	2,843	57.7	13.4	26.2	2.7	100.0	2,411
Separated	71.7	74	83.1	53	59.6	11.9	28.5	0.0	100.0	44
Deserted	57.1	84	82.5	48	44.9	19.3	31.3	4.4	100.0	40
Divorced	47.7	76	80.3	36	61.7	11.9	12.1	6.9	100.0	29
Widowed	51.9	255	79.2	132	56.7	9.9	29.4	2.0	100.0	105
Education										
No education	64.5	1,920	85.1	1,238	55.9	14.7	26.8	2.6	100.0	1,054
Primary	62.9	1,280	85.4	805	56.3	13.2	29.1	1.3	100.0	688
Secondary	53.9	1,537	83.9	829	61.1	9.7	23.3	3.9	100.0	695
Higher Secondary	38.9	437	80.4	170	63.4	10.5	23.4	2.6	100.0	137
University/College	29.7	240	78.7	71	45.9	23.9	24.4	5.9	100.0	56
Residence										
City	60.3	2,505	82.5	1,510	68.4	4.8	23.4	3.4	100.0	1,245
District	51.8	2,444	85.3	1,266	48.4	18.1	31.5	2.1	100.0	1,080
Thana	72.4	465	90.3	336	45.9	32.6	19.5	2.0	100.0	304
Total UFHP	57.5	5,414	84.5	3,112	57.6	13.5	26.3	2.7	100.0	2,629

Table 9.1B Knowledge and Awareness of Temporary/Satellite Clinics in non-UFHP areas

Percentage of women by awareness of temporary/satellite clinic and by awareness of types of clinic and occurrence of clinic by background characteristics, non-UFHP areas

	Awareness of	Number of	Clinic held in	Number of Women	Women Type of Temporary/Satellite Clinic							
Background Characteristic	temporary/ satellite clinic	Women	last 3 months?	Knowing of Temporary Clinics	UFHP	Governm ent	Other	Don't Know	Total	Number of Women Reporting Clinics in Last 3 Months		
A												
Age 15-19	42.5	226	84.4	96	50.6	12.3	25.0	1.2	100.0	81		
20-24	45.5 45.5	330	80.7	96 150	59.5	9.1	35.8 29.8	1.7	100.0	121		
25-29	47.1	308	86.9	145	59.5 57.9	9.1	30.2	2.4	100.0	121		
30-39	52.5	324	85.9	170	45.9	15.1	37.0	2.4	100.0	146		
40-49	47.4	586	82.4	278	52.4	11.8	34.1	1.7	100.0	229		
Marital status												
Currently Married	48.1	1,610	84.4	774	53.1	12.1	32.9	1.8	100.0	653		
Separated	45.0	20	88.9	9	62.5	12.5	25.0	0.0	100.0	8		
Deserted	37.0	46	76.5	17	53.8	0.0	46.2	0.0	100.0	13		
Divorced	28.0	25	71.4	7	40.0	20.0	40.0	0.0	100.0	5		
Widowed	46.8	79	75.7	37	53.6	3.6	39.3	3.6	100.0	28		
Education												
No education	52.8	597	86.0	315	55.4	12.2	31.4	1.1	100.0	271		
Primary	53.6	457	85.3	245	53.1	9.0	33.5	2.4	100.0	209		
Secondary	45.4	504	80.8	229	51.9	10.8	34.6	2.7	100.0	185		
Higher Secondary	27.2	151	82.9	41	52.9	8.8	38.2	0.0	100.0	34		
University/College	19.7	71	57.1	14	12.5	37.5	50.0	0.0	100.0	8		
Total non-UFHP	47.4	1,780	83.8	844	53.2	11.6	33.4	1.8	100.0	707		

#### 9.2 Knowledge of ESP Services at Satellite Clinics

Knowledge of ESP services available at UFHP satellite clinics was ascertained by asking a respondent to tell what services were available at the satellite clinic(s) that she said she knew of. Again, this set of questions was also asked in the 1998 Survey and was asked only of those women who reported being aware of a satellite clinic in the first set of questions.

Table 9.2 shows the percentage of women knowing of specific type of services available at a specific type of satellite clinics. Child health related services, more specifically EPI services, were the most known of services provided by UFHP satellite clinics. About 90 percent of women knew of child health related services of UFHP satellite clinics, with nearly 80 percent specifically mentioning EPI services. Knowledge of any other child health related services, except EPI services, was much less common. Known to over 70 percent of women, the next most known services of UFHP satellite clinics, after child health related services, were maternal health related services, mostly the services providing tetanus toxoid injections and ANC. Few women mentioned PNC services provided by UFHP satellite clinics. Family planning services of UFHP satellite clinics were also widely known. Half of respondents reported that family planning services were available at UFHP satellite clinics, with 38 percent mentioning that they provide non-clinical family planning methods and a slightly fewer 36 percent mentioning that they provide clinical family planning methods. Only a quarter of respondents reported that UFHP satellite clinics provide treatment for general types of illness. Like UFHP satellite clinics, government satellite clinics or other satellite clinics were equally widely known for the child and maternal health related services. But for family planning services, there were no other satellite clinics found to be so widely known as the UFHP clinics. Only slightly over a quarter of respondents mentioned the availability of family planning services at government satellite clinics and only about a quarter at other satellite clinics. compared to 50 percent for UFHP clinics.

There were little or no variations in awareness of satellite clinic services between UFHP areas and non-UFHP areas, showing that UFHP satellite clinic services were almost as equally known in the non-UFHP areas as in the UFHP areas. However, there were some notable variations in the knowledge of satellite clinic services within the UFHP areas by type of urban centers. For their maternal and child health related services, UFHP clinics were known best in cities, least in thana towns. The reverse was true for family planning services, being best known in thana towns and least known in cities. For maternal and child health services, government satellite clinics were generally better known in the thana and district towns, while for family planning services they were generally better known in cities and district towns.

Table 9.3 presents awareness of ESP services, aggregated into basic categories, by selected background characteristics in UFHP areas. Except for family planning services, there are few differences by the selected background characteristics for maternal services nor for child health services. Family planning services were more likely to be mentioned by women who were currently married or separated, aged 20-39, had primary school education, or lived in City Corporations.

Table 9.2 Knowledge of ESP Services at temporary/satellite clinics

Percentage of women who identify specific services at temporary/satellite clinic, by city type and UFHP/non-UFHP areas

		Ci	ty			Dist	rict			Tha	na			UFHP	total			Non-U	JFHP	
Background Characteristic	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK
Family Planning	45.7	32.2	36.3	23.6	53.7	27.7	16.0	21.9	62.4	17.2	14.7	3.2	50.0	25.6	24.5	21.3	64.1	18.3	33.1	23.1
Clinical Method	33.0	21.3	17.3	20.9	39.5	9.2	9.0	14.6	38.8	9.4	12.7	0.0	35.7	12.4	12.8	17.1	48.7	12.2	21.6	15.4
Non-clinical method	31.9	21.7	27.7	15.2	43.4	25.5	13.0	21.9	55.6	12.3	8.9	3.2	38.0	21.2	18.9	16.4	52.7	12.2	25.4	15.4
Advice for Side Effects	3.0	4.3	0.8	2.8	3.0	1.5	0.0	0.0	1.3	1.1	1.0	0.0	2.9	1.8	0.4	1.7	1.3	1.2	0.4	0.0
Maternal Health	74.8	37.9	65.0	42.0	68.3	67.1	71.2	47.6	60.3	62.7	70.4	89.5	71.2	60.9	68.5	47.8	66.0	61.0	68.6	69.2
ANC	45.2	19.0	30.4	33.4	37.2	17.5	20.6	27.1	37.7	14.9	23.6	18.7	41.8	17.0	25.0	30.1	39.6	8.5	34.3	30.8
PNC	5.9	6.5	8.4	9.5	3.8	3.7	6.0	0.0	5.8	3.9	2.4	15.5	5.1	4.3	6.7	7.0	7.2	1.2	8.9	7.7
TT	56.6	27.4	54.2	23.7	48.3	58.0	63.3	31.0	38.0	55.3	52.9	89.5	52.0	52.1	58.6	31.6	45.7	57.3	54.2	61.5
Child Health	92.0	89.0	91.8	100.0	87.5	97.4	98.1	73.2	81.8	97.2	94.0	100.0	89.5	95.9	95.1	91.4	88.0	98.8	93.6	92.3
EPI	86.2	84.7	80.0	90.3	71.6	95.5	95.4	71.7	58.3	95.9	71.4	100.0	78.6	93.8	86.8	85.2	69.9	96.3	86.0	84.6
Diarrhea Treatment/ORS	1.3	2.0	1.8	0.0	3.2	0.0	1.8	0.0	2.3	0.9	0.0	0.0	2.1	0.6	1.6	0.0	2.4	0.0	2.1	0.0
ARI Treatment	0.5	2.0	1.3	0.0	0.9	1.0	0.7	0.0	0.5	0.9	0.0	0.0	0.6	1.2	0.9	0.0	0.3	0.0	0.0	0.0
Vitamin A	12.7	30.0	16.8	15.0	17.7	24.6	21.1	9.8	15.5	34.2	25.8	45.5	14.7	28.2	19.7	15.9	7.7	28.0	16.9	0.0
Illnesses (General)	23.4	12.7	22.2	19.3	25.7	4.6	9.9	13.5	30.5	8.8	21.7	12.0	24.8	7.2	17.1	16.8	25.0	8.5	20.8	15.4
Other Child Care	6.7	2.0	9.9	6.1	6.9	3.1	5.1	4.6	7.8	3.8	7.4	0.0	6.9	3.1	7.3	5.1	15.2	2.4	7.2	0.0
Treatment of RTI/STD	0.0	0.0	0.5	0.0	0.0	0.0	0.7	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0
General Health	6.7	4.7	6.0	2.9	7.6	3.9	0.4	0.0	5.9	1.5	2.0	0.0	6.9	3.4	2.9	1.7	5.9	4.9	3.0	23.1
Other	0.8	4.7	2.2	5.9	0.5	0.7	5.7	3.4	2.0	2.1	0.8	0.0	0.8	1.8	3.8	4.6	5.1	13.4	12.3	23.1
Does not Know	4.2	2.0	3.6	0.0	2.5	0.8	0.1	0.0	5.8	1.7	3.5	0.0	3.7	1.3	1.9	0.0	3.5	0.0	0.8	7.7
Number of Women	852	60	291	42	523	195	340	22	139	99	59	6	1,514	354	691	70	376	82	236	13

UFHP SC = UFHP Satellite Clinic; GOB SC = Gov't of Bangladesh Satellite Clinic; Oth=Other satellite clinic; DK = Don't know type of satellite clinic

Note: Numerator is the number of women knowing of a specific service as available; Denominator is the number of women knowing of a satellite clinic and the clinic has occurred within the past 3 months.

Table 9.3 Knowledge of ESP Services

Percentage of women who can name ESP services, by selected background characteristics, UFHP areas

Background characteristic	Family Planning	Maternal Health	Child Health	Other Reproductive Health	Number of Women
Ago					
Age 15-19	36.8	71.1	90.6	0.0	337
20-24	43.6	70.2	91.9	0.0	502
25-29	46.2	70.2	91.7	0.0	502
30-39	40.7	66.1	94.6	0.2	443
40-49	33.1	66.2	91.5	0.4	816
Marital status					
Currently Married	40.3	68.6	91.8	0.1	2,411
Separated	37.3	69.8	100.0	0.0	44
Deserted	19.0	52.2	93.4	0.0	40
Divorced	34.1	76.2	93.1	0.0	29
Widowed	26.1	70.0	90.4	1.5	105
Education					
No education	38.6	67.6	92.5	0.2	1,054
Primary	45.0	71.7	92.0	0.2	688
Secondary	35.6	68.1	90.8	0.1	695
Higher Secondary	37.6	65.8	92.4	0.6	137
University/College	29.4	56.6	91.9	0.0	56
Number of Living Children					
0	23.7	62.1	89.8	0.0	262
1	40.9	68.3	90.3	0.1	568
2	41.2	72.1	93.0	0.0	704
3	43.4	66.3	93.1	0.2	432
4 +	39.2	68.6	92.1	0.5	663
Residence					
City	42.1	69.6	92.1	0.1	1,245
District	36.5	68.6	92.3	0.2	1,080
Thana	37.2	63.6	89.6	0.3	304
Total UFHP	39.3	68.5	91.9	0.2	2,629
Total non-UFHP	47.7	66.3	91.2	0.0	707

Note: Numerator is the number of women knowing of a specific service as available; Denominator is the number of women knowing of a satellite clinic and the clinic has occurred within the past 3 months.

## 9.3 Use of Temporary/Satellite Clinics

Unlike in the 1998 Baseline Survey, women in the 2001 Survey who knew of a temporary/satellite clinic, which was conducted in their area of residence during the past 3 months, were asked if they had ever used the clinic and, if so, if they had used it in the past 3 months. This latter set of questions was used to illicit information on satisfaction with care while reducing the possibility of recall bias from use in the distant past. Women who did not identify a clinic or did not report a clinic as being conducted in their area in the past 3 months were assumed to have not used the clinics. This is admittedly a cumbersome selection process for examining use of UFHP services, but obviously women who were unaware of a satellite clinic cannot be asked if they used services at a satellite clinic. Further, asking questions about use of any satellite clinic, as compared with simply asking about use of UFHP satellite clinics, allows for comparisons in satisfaction and quality between UFHP clinics and non-UFHP clinics.

As shown in Table 9.4, not many respondents, 15 percent, said that they had ever gone to a satellite clinic in UFHP areas to obtain services, although nearly six out of every ten ever married women were aware of such clinics held in their areas. In the UFHP areas, most recently, that is, in the three months preceding the survey, only 6 percent of respondents reported using an UFHP satellite clinic, and even fewer a government satellite clinic (only one percent) or any other satellite clinic (3 percent). Yet at this observed low level of use of satellite clinics, the proportion of women having ever used an UFHP satellite clinic (15 percent) was more than three times those for government satellite clinics (4 percent) and more than two times those for the other satellite clinics (7 percent).

Nearly 11 percent of women even in non-UFHP areas reported having ever used an UFHP clinic, compared to 15 percent of those in UFHP areas. Thus, there were only small discernible variations apparent in the use of satellite clinics between the UFHP and non-UFHP areas. However, within the UFHP areas, the use of UFHP clinics was most common in Cities (18 percent) and least common in District Municipalities (11 percent), with Thana Municipalities (15 percent) between them. Although there were no marked variations in the use of satellite clinics by women's age or their marital status, women appeared more likely to have used an UFHP satellite clinic if they were currently married/separated or if they were in the age range of 15–29 years. The most prominent differentials were associated with the education of women, showing uneducated or less educated women more likely to have used a UFHP clinic. In the UFHP areas, 16 percent of women without education or with a primary level of education reported to have ever used an UFHP satellite clinic compared to only 8 percent of those with a higher secondary education and a mere 2 percent of those with a college/university education.

Table 9.4 Usage of Temporary/Satellite Clinics

Percentage of women who have ever used satellite/temporary clinic and used clinic in past 3 months by selected background characteristics, UFHP areas

	Ever	Used Tempor	ary/Satellite C	Clinic	Used Temp	porary/Satellit	e Clinic in Pas	at 3 Months	
Background characteristic	UFHP Satellite Clinic	Govern- ment Clinic	Other Satellite Clinic	Don't Know Type of Clinic	UFHP Satellite Clinic	Govern- ment Clinic	Other Satellite Clinic	Don't Know Type of Clinic	Number of Women
Age									
15-19	16.1	3.4	6.3	0.6	5.2	1.8	2.7	0.2	647
20-24	17.7	4.6	8.1	0.0	8.7	1.5	3.6	0.2	982
25-29	18.1	5.3	7.4	0.1	8.5	2.0	3.5	0.3	998
30-39	14.0	3.3	7.5	0.4	6.0	0.7	2.4	0.0	932
40-49	10.8	2.7	5.2	0.6	4.1	0.7	1.5	0.1	1,786
Marital status									
Currently Married	15.2	3.8	7.0	0.6	6.6	1.3	2.6	0.2	4,925
Separated	16.8	2.9	4.5	0.0	2.8	0.0	4.5	0.0	74
Deserted	3.9	1.8	6.7	0.7	1.6	0.5	1.5	0.0	84
Divorced	6.5	4.2	0.6	0.0	0.5	0.4	0.6	0.0	76
Widowed	7.2	2.0	2.8	0.0	4.4	0.7	1.3	0.0	255
Residence									
City	18.3	1.1	5.1	0.7	7.5	0.5	2.2	0.2	2,505
District	10.6	4.9	8.2	0.3	4.8	1.5	3.0	0.1	2,444
Thana	15.1	11.3	6.9	0.7	6.8	3.8	2.2	0.2	465
Education									
No education	16.7	4.7	7.7	0.7	7.5	1.3	3.4	0.2	1,920
Primary	16.4	4.3	9.7	0.4	6.9	1.6	3.2	0.1	1,280
Secondary	13.6	2.4	4.4	0.6	5.6	1.0	1.7	0.2	1,537
Higher Secondary	9.3	2.1	3.0	0.3	3.8	0.5	0.6	0.0	437
University/College	2.6	3.4	2.4	0.2	1.2	0.9	1.2	0.2	240
Total UFHP	14.5	3.7	6.7	0.5	6.2	1.2	2.5	0.1	5,414
Total non-UFHP	10.8	2.0	6.3	0.1	5.0	0.7	2.1	0.0	1,780

Note: Numerator is the number of women having ever used or used a temporary/satellite clinic in the past 3 months; Denominator is the number of women knowing of a satellite clinic and the clinic has occurred within the past 3 months.

#### 9.4 Essential Service Package (ESP) Services Ever Used at Temporary/Satellite Clinics

Table 9.5 presents the percentage of women who have ever used specific services at satellite clinics given that they have reported knowing of a satellite clinic and that the satellite clinic was held in the past 3 months. The most commonly ever-used services from UFHP satellite clinics in UHFP areas were the child health related services, used by 62 percent of respondents who have ever visited those clinics. The next most ever used services from UFHP satellite clinics were maternal health related services (30 percent). Child health related services were mostly used for immunization of children, while maternal health related services were usually used for ANC and the tetanus toxoid injections. UFHP satellite clinics also had a significant proportion of women using their family planning services for both clinical and non-clinical methods. About a quarter of women having used UFHP satellite clinics reported having been treated for general types of illness, while about 6 percent received vitamin A capsules from those clinics.

Like UFHP satellite clinics, government satellite clinics or other satellite clinics were equally widely used for the child and maternal health related services. However, for family planning services, there were no other satellite clinics as widely used as the UFHP clinics. While 29 percent of women having ever used UFHP satellite clinics reported having obtained family planning services from those clinics, the corresponding proportion for government satellite clinics was only about 15 percent and that for the other satellite clinics only about 8 percent.

Between the UFHP and non-UFHP areas, there was little difference in the use of satellite clinic services, with the users of UFHP satellite clinics in non-UFHP areas being almost as equally likely to use their specific services as those of the UFHP areas. However, within UFHP areas, family planning services were most often used at UFHP satellite clinics in Thana Municipalities (42 percent) while maternal health services (32 percent) and child health services (69 percent) were most often used in City Corporations. For maternal and child health services, government satellite clinics were relatively more used in the Thana Municipalities, while for family planning services they were relatively more used in cities and district towns.

# 9.5 Use of ESP Services at Satellite Clinics in Most Recent Visit in past 3 months

Table 9.6 presents the percentage of women who used a specific service in the most recent visit to a satellite clinic in the three months preceding the survey. Again, this involves only the subset of women who report knowing of a satellite clinic and knowing that it was held in the past 3 months. Child health related services and family planning services were the most often used of services provided by satellite clinics. In their most recent visit to a UFHP satellite clinic, 43 percent of respondents who visited such clinics in the last three months reported obtaining child health related services and 40 percent family planning services. Although maternal health related services of satellite clinics were the services next most ever used by women, these services appeared to be much less often used compared to the child health related services and the family planning services. Only 16 percent of the respondents reported using maternal health related services in their most recent visit to a UFHP satellite clinic. Women were also found to be visiting UFHP clinics relatively less often for treatment of general illnesses (12 percent). Government satellite clinics and other satellite clinics both had more or less a similar frequency pattern of the most recent uses of their services by the clients as the UFHP clinics. There was a striking variation in the use of UFHP satellite clinics between the UFHP and non-UFHP areas. Women using UFHP clinics were more likely to use them for family planning services in the non-UFHP areas than in the UFHP areas. In their most recent visit to an UFHP satellite clinic, 61 percent of women who visited such clinics in the last three months used family planning services in the non-UFHP areas, while the corresponding percentage for the UFHP areas was only 41 percent. Compared to UFHP satellite clinics, government satellite clinics and other satellite clinics were relatively more often used in the client's most recent visit in the last three months for child health related services in both the UFHP and non-UFHP areas and for maternal health services in non-UFHP areas. Within the UFHP areas, UFHP satellite clinics were relatively more often used in Thana Municipalities than in District Municipalities and Cities for family planning services, while the reverse was true for the maternal and child health related services.

<u>Table 9.5 ESP Services Ever Used at temporary/satellite clinics</u>

Percentage of women who have ever used specific services at temporary/satellite clinic, by city type and UFHP/non-UFHP area.

		Ci	ty			Dist	rict			Tha	ana			UFHI	P total			Non-l	UFHP	
Service	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK
Family Planning Clinical Method Non-clinical method Advice for Side Effects of Treatment  Maternal Health ANC PNC	26.2 17.4 7.4 3.6 32.2 16.3 0.2	18.5 9.3 9.3 0.0 30.1 9.9 4.8	10.6 7.8 5.7 0.0 30.8 9.7 1.9	7.4 0.0 7.4 0.0 35.1 15.4 0.0	29.1 20.2 10.4 1.2 27.3 13.2 0.9	17.7 4.3 14.5 0.0 22.9 1.8 0.0	5.4 3.5 2.3 0.0 44.3 9.9 1.4	0.0 0.0 0.0 0.0 25.6 0.0 0.0	42.4 25.8 20.4 1.3 25.1 13.3 1.0	6.0 3.4 3.8 0.0 37.4 0.0 0.0	8.1 8.1 0.0 0.0 26.2 5.5 2.7	6.2 0.0 6.2 0.0 18.8 18.8 18.8	28.6 19.1 9.5 2.6 30.0 15.0 0.5	14.8 4.7 10.9 0.0 27.8 2.4 0.7	7.5 5.4 3.3 0.0 38.0 9.4 1.7	5.4 0.0 5.4 0.0 30.9 9.9 2.0	42.2 32.3 10.4 2.1 27.1 13.0 1.0	2.9 0.0 2.9 0.0 40.0 2.9 0.0	9.5 8.8 3.5 0.0 42.5 8.0 0.9	0.0 0.0 0.0 0.0 100.0 0.0 0.0
TT Child Health	24.3 69.0	25.1 70.7	25.2 72.7	27.3 58.0	16.0 53.2	21.2 78.4	39.1 71.1	25.6 93.2	12.7 54.1	37.4 84.2	18.1 76.4	18.8 93.8	20.6 62.4	26.0 78.9	32.3 72.2	25.9 70.8	19.3 51.6	37.1 80.0	38.9 75.2	100.0
EPI Diarrhea Treatment/ /ORS ARI Treatment Vitamin A Illnesses (General)	52.6 0.0 0.0 7.1 14.3	49.1 0.0 0.0 30.3 8.6	56.5 1.1 0.0 10.7 17.1	51.7 0.0 0.0 6.3 0.0	38.7 0.0 0.0 4.0 13.0	70.0 0.4 0.0 14.5 3.2	0.0 0.0 10.6 6.5	93.2 0.0 0.0 0.0 0.0	33.8 0.1 0.0 5.8 18.3	69.6 1.2 0.0 18.6 5.1	49.3 0.0 0.0 18.6 20.4	75.0 0.0 0.0 37.5 0.0	0.0 0.0 0.0 6.0 14.2	0.6 0.0 17.7 4.4	0.4 0.0 9.4 9.5	0.0 0.0 8.1 0.0	34.4 0.0 0.0 1.6 16.1	0.0 2.9 2.9 0.0	1.8 0.0 13.3 13.3	0.0 0.0 0.0 0.0 0.0
Other Child Care  Treatment of RTI/STD	2.2	0.0	2.0	0.0	1.8	1.8	3.0	0.0	3.2	3.0	2.7	0.0	2.2	0.0	2.6 0.0	0.0	1.0	0.0	2.7	0.0
General Health Other Does not Know	3.4 1.2 0.0	0.0 0.0 0.0	3.3 5.0 0.0	7.4 20.4 0.0	8.1 2.5 0.0	0.2 1.3 0.0	0.4 5.5 0.0	0.0	4.7 1.1 0.0	3.9 0.8 0.0	0.0 2.7 4.0	0.0	5.1 1.6 0.0	1.2 1.0 0.0	1.6 5.2 0.0	4.7 13.0 0.0	3.1 3.6 0.5	0.0 8.6 0.0	0.9 10.6 0.0	0.0
Number of Women	458	28	127	18	259	119	201	7	70	52	32	3	787	199	361	28	192	35	113	1

UFHP SC = UFHP Satellite Clinic; GOB SC = Gov't of Bangladesh Satellite Clinic; Oth=Other satellite clinic; DK = Don't know type of satellite clinic

Note: Numerator is the number of women having ever used a specific service at a temporary/satellite clinic; Denominator is the number of women having ever used a temporary/satellite clinic and the clinic was held in the past 3 months.

Table 9.6 ESP Services Used in most recent visit in past 3 months at temporary/satellite clinics

Percentage of Women who have used specific services in most recent visit in past 3 months at temporary/satellite clinic by city type and UFHP/non-UFHP area.

		Ci	ty			Dist	rict			Tha	ana			UFHF	total			Non-U	JFHP	
Service	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK	UFHP SC	GOB SC	Oth	DK
Family Planning Clinical Method Non-clinical method Advice for Side Effects of Treatment	38.7 27.8 10.9	44.6 22.3 22.3	21.3 12.0 6.7	0.0 0.0 0.0	40.2 24.0 15.5	28.5 7.8 20.7	7.4 4.5 2.8	0.0 0.0 0.0	52.6 27.4 25.2	5.0 1.1 3.9	4.1 4.1 0.0	0.0 0.0 0.0	40.5 26.4 13.8	25.1 8.6 16.5	12.6 7.5 4.2	0.0 0.0 0.0	60.7 43.8 15.7	15.4 0.0 15.4 0.0	13.2 10.5 2.6	44.7 30.0 14.2
Maternal Health ANC PNC TT	14.9 8.3 10.8	0.0 0.0 0.0	17.2 7.2 12.6	31.1 31.1 31.1	20.8 10.3 9.5	2.1 0.0 2.1	26.3 4.6 21.7	60.1 0.0 60.1	7.1 2.1 5.0	17.6 0.0 17.6	14.0 0.0 14.0	0.0 0.0 0.0	16.2 8.4 10.5	5.8 0.0 5.8	21.8 5.3 17.5	37.6 14.8 37.6	21.3 3.4 18.0	38.5 0.0 38.5	39.5 7.9 31.6	17.3 7.4 12.1
Child Health EPI Diarrhea Treatment/ /ORS	46.0 30.3	67.3 67.3	59.3 40.4	36.8 36.8	40.4 25.0	68.5 48.0	63.8 59.1	84.0 84.0	39.6 29.6	70.7 49.1	90.3 56.9	100.0	43.4 28.1	68.8 51.7	64.0 51.5	63.8 63.8	23.6 10.1	53.8 53.8	52.6 42.1	39.3 24.4
ARI Treatment Vitamin A Illnesses (General) Other Child Care	6.7 9.0 1.9	0.0 0.0 0.0	8.7 16.4 0.0	0.0 0.0 0.0	3.4 12.2 1.7	17.0 5.7 0.0	6.9 4.7 0.4	0.0 0.0 0.0	0.5 12.0 2.8	14.7 5.8 1.5	22.1 27.9 0.0	0.0 0.0 0.0	5.0 11.5 1.9	13.4 4.8 0.4	8.8 9.1 0.2	0.0 0.0 0.0	0.0 12.4 1.1	0.0 0.0 0.0	2.6 10.5 2.6	3.9 1.7 1.8
Treatment of RTI/STD  General Health	0.0 4.3	0.0	0.0 7.3	0.0	6.7	0.0 5.7	0.0	0.0	2.1	3.2	0.0	0.0	5.0	0.0 4.0	0.0 2.9	0.0	2.2	0.0	0.0	0.2 4.4
Other Number of Women	2.9 188	0.0	0.0 54	32.1	2.2 118	1.9 37	<ul><li>2.5</li><li>73</li></ul>	0.0	1.9 32	7.2 17	0.0	0.0	2.6 338	3.0 66	1.3 138	15.3	3.4 89	0.0	5.3 38	2.7 427

UFHP SC = UFHP Satellite Clinic; GOB SC = Gov't of Bangladesh Satellite Clinic; Oth=Other satellite clinic; DK = Don't know type of satellite clinic Note: Numerator is the number of women having used a specific service at a temporary/satellite clinic in the past 3 months; Denominator is the number of women having used a temporary/satellite clinic in the past 3 months and the clinic was held in the past 3 months.

# 9.6 Assessment of Quality of Care at Temporary/Satellite Clinics

Among women who used a temporary/satellite clinic in the past 3 months, a series of questions was asked to elicit responses regarding the quality of the care received, satisfaction with care, the amount paid for services, and the average length of time that women waited to be treated. Table 9.7A presents this information for UFHP and non–UFHP areas, while table 9.7B presents the information for the city types of UFHP areas.

On average, women at UFHP satellite clinics paid approximately 10 taka for a visit. One-quarter of clients paid nothing for the services received. This is in contrast to users of government satellite clinics, where 81 percent received services for free. A more apt comparison, however, would be with other NGO clinics, but that comparison is not available. Regardless, almost half of clients (and 63 percent of paying clients) felt that the amount paid at UFHP clinics was "reasonable." Just under 8 percent of visitors felt that the amount paid was "too low," while 20 percent felt that the amount paid was "high." These proportions are roughly similar to those at UFHP clinics in non-UFHP areas, although a smaller percentage of users of UFHP clinics in non-UFHP areas reported services that were free.

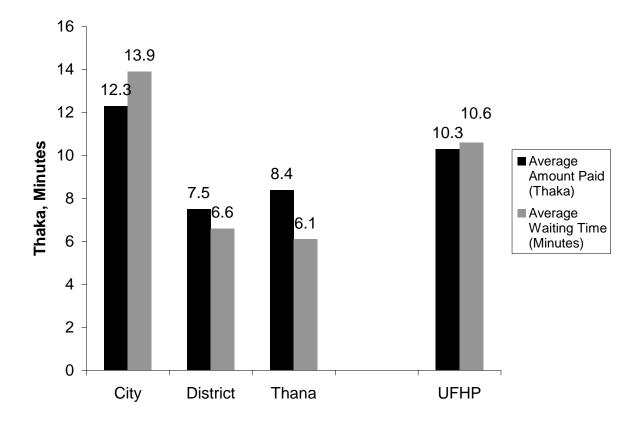
The mean prices paid at UFHP satellite clinics were 12.3 taka in City Corporations, 7.5 taka in District Municipalities, and 8.4 taka in Thana Municipalities (Figure 9.1). In City Corporations, this was less than what was paid by users of "other" types of satellite clinics, likely other NGOs. The proportion of users that received services free of charge was highest in Thana Municipalities (31 percent) and lowest in City Corporations (22 percent).

On average, the length of time that women had to wait to receive services at UFHP satellite clinics was 11 minutes. This was 5 minutes longer than the average wait at government temporary/satellite clinics in UFHP areas, but such comparisons do not necessarily take into account the relative density of patient flows at the two different types of satellite clinics. Greater waiting times could reflect greater demand for services or more time spent by staff with each patient. More than half of users of UFHP satellite clinics report that they had no wait. Of those who did have to wait, most felt that the length of time was "reasonable." A smaller proportion of users of government satellite clinics, 30 percent, experienced any wait at government satellite clinics.

Among users of UFHP satellite clinics, mean waiting times were longest in City Corporations (13.9 minutes) and lowest in Thana Municipalities (6.1 minutes). In Thana Municipalities, the mean waiting time at UFHP satellite clinics was only slightly higher than the mean waiting time at government satellite clinics (5.3 minutes).

Ratings of staff behavior, quality of services, and cleanliness of clinic were overwhelmingly "good" or "very good" for all types of clinics (UFHP, government or other) in all areas and city types. Distinctions could perhaps be made between the proportions of clients responding "good" relative to "very good," but such distinctions would probably lack statistical significance. Most users of UFHP satellite clinics in UFHP areas (93.5 percent) said that they would recommend UFHP satellite clinics to family or friends. Only 3.8 percent said they would not. In comparison, no users of government satellite clinics said that they would not recommend the government satellite clinic.

Figure 9.1 Mean Expenditure (Taka) and Mean Waiting Time (Minutes) Among Users of UFHP Satellite Clinics



<u>Table 9.7A Quality of Temporary/Satellite Clinics</u>
User's perceptions of quality of treatment at temporary/satellite clinics in most recent visit in past 3 months, UFHP and non-UFHP areas

s perceptions or quanty or		UF	HP			Non-U	JFHP	
Quality Indicators	UFHP Satellite Clinic	Government Satellite Clinic	Other Satellite Clinic	Don't know type of Satellite Clinic	UFHP Satellite Clinic	Government Satellite Clinic	Other Satellite Clinic	Don't know type of Satellite Clinic
Average Amount Paid	10.3	1.4	7.5	3.7	10.0	4.2	6.8	10.2
Cost of Treatment								
Free	24.9	80.6	64.0	85.2	12.4	76.9	52.6	21.8
Low	7.9	6.6	7.4	0.0	7.9	7.7	52.6 13.2	7.9
Reasonable	47.1	8.1	20.7	14.8	56.2	7.7	21.1	49.4
High	20.1	4.8	7.8	0.0	23.6	7.7	21.1 13.2	20.9
Mean Waiting time at Clinic (in minutes)	10.6	5.6	8.8	6.0	8.2	7.8	6.9	10.0
Assessment of Length of wait								
No wait	54.9	69.8	63.4	62.0	60.7	46.2	60.5	56.3
Low	5.4	4.0	6.4	0.0	3.4	0.0	10.5	4.9
Reasonable	32.8	21.1	25.2	31.9	25.8	53.8	23.7	31.1
High	6.9	5.1	5.0	6.1	10.1	0.0	5.3	7.7
Staff Behavior								
Bad	1.5	2.2	1.9	0.0	0.0	0.0	0.0	1.1
Good	84.4	89.5	88.8	93.9	79.8	92.3	97.4	83.2
Very Good	14.2	8.3	9.4	6.1	19.1	7.7	2.6	15.4
Missing	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.3
Quality of Services								
Bad	3.6	3.9	3.4	0.0	0.0	7.7	0.0	2.7
Good	87.4	94.1	84.6	93.9	87.6	92.3	94.7	87.4
Very Good	9.0	2.0	12.0	6.1	11.2	0.0	5.3	9.5
Missing	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.3
Cleanliness of Clinic								
Bad	2.3	4.3	0.9	0.0	0.0	0.0	0.0	1.7
Good	92.6	95.7	90.8	93.9	89.9	100.0	92.1	91.9
Very Good	5.2	0.1	8.3	6.1	9.0	0.0	7.9	6.1
Missing	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.3
Recommend Clinic to Others								
Yes	95.4	100.0	97.2	100.0	97.8	92.3	97.4	96.0
No	3.2	0.0	2.8	0.0	0.0	7.7	2.6	2.4
Missing	1.4	0.0	0.0	0.0	2.2	0.0	0.0	1.6
Number of Women	338	66	138	8	89	13	38	427

Table 9.7B Quality of Temporary/Satellite Clinics

User's perceptions of quality of treatment at temporary/satellite clinics in most recent visit in past 3 months, by city type, UFHP areas

eser s perceptions of quanty o			City				istrict	J1 /		T	hana	
Quality Indicators	UFHP Satellite Clinic	Govern- ment Satellite Clinic	Other Satellite Clinic	Don't know type of Satellite Clinic	UFHP Satellite Clinic	Govern- ment Satellite Clinic	Other Satellite Clinic	Don't know type of Satellite Clinic	UFHP Satellite Clinic	Govern- ment Satellite Clinic	Other Satellite Clinic	Don't know type of Satellite Clin
Average Amount Paid	12.3	5.2	16.4	7.8	7.5	0.4	1.0	0.0	8.4	1.1	6.7	0.0
Cost of Treatment Free Low Reasonable High	21.9	43.7	35.3	68.9	28.1	92.1	82.2	100.0	30.6	80.5	87.4	100.0
	10.0	22.3	14.4	0.0	5.8	0.0	3.3	0.0	3.3	10.0	0.0	0.0
	46.8	10.4	33.7	31.1	52.4	7.9	12.8	0.0	29.5	7.0	8.4	0.0
	21.3	23.6	16.7	0.0	13.7	0.0	1.7	0.0	36.5	2.4	4.1	0.0
Mean Waiting time at Clinic (minutes)	13.9	9.9	13.0	0.0	6.6	4.5	5.7	15.8	6.1	5.3	8.1	0.0
Assessment of Length of wait No wait Low Reasonable High	47.7	55.1	61.9	100.0	64.2	73.2	66.4	0.0	62.4	72.4	50.0	100.0
	6.0	0.0	4.8	0.0	4.6	2.1	8.6	0.0	4.3	10.5	0.0	0.0
	39.2	22.6	28.5	0.0	24.0	24.8	20.7	84.0	28.1	12.5	38.9	0.0
	7.1	22.3	4.8	0.0	7.2	0.0	4.3	16.0	5.2	4.6	9.0	0.0
Staff Behavior Bad Good Very Good Missing	0.7	0.0	2.3	0.0	3.0	1.9	1.1	0.0	0.0	4.3	5.5	0.0
	83.3	77.7	82.7	100.0	85.5	92.0	95.2	84.0	86.6	92.0	75.0	100.0
	16.0	22.3	15.0	0.0	11.5	6.1	3.7	16.0	13.4	3.7	19.5	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Quality of Services Bad Good Very Good Missing	4.7	0.0	7.4	0.0	2.9	5.9	0.0	0.0	0.0	2.1	5.5	0.0
	85.5	100.0	77.6	100.0	91.0	92.2	92.1	84.0	84.8	94.4	69.5	100.0
	9.8	0.0	15.0	0.0	6.1	1.9	7.9	16.0	15.2	3.4	25.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cleanliness of Clinic Bad Good Very Good Missing	2.0 91.9 6.1 0.0	0.0 100.0 0.0 0.0	2.3 82.7 15.0 0.0	0.0 100.0 0.0 0.0	2.4 94.0 3.6 0.0	5.9 94.1 0.0 0.0	0.0 96.4 3.6 0.0	0.0 84.0 16.0 0.0	3.4 91.2 5.4 0.0	3.6 96.2 0.2 0.0	0.0 94.5 5.5 0.0	0.0 100.0 0.0 0.0
Recommend Clinic to Others Yes No Missing Number of Women	96.5	100.0	93.0	100.0	93.5	100.0	100.0	100.0	96.4	100.0	100.0	100.0
	2.7	0.0	7.0	0.0	3.8	0.0	0.0	0.0	3.6	0.0	0.0	0.0
	0.8	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	188	11	54	4	118	37	73	3	32	17	10	1

# 9.7 Awareness of Sources of Health and Family Planning Services

Respondents were asked if they knew of any clinic/hospital in their respective areas from where they could get health or family planning services. The intent was to find out how familiar women were with the health facilities providing health or family planning services in their areas. The other intent (and of course more important intent) was to find out how far UFHP health facilities have been able to disseminate awareness about themselves in the population, compared to other types of health facilities. As with satellite clinics, this set of questions was also asked in the 1998 Baseline Survey.

Most women, 91 percent in UFHP areas and 92 percent in non-UFHP areas, were able to identify a clinic or hospital in their areas providing health or family planning services (Table 9.8). The proportion of women able to identify a hospital/clinic, perhaps surprisingly, was lowest in City Corporations (86.5 percent). The proportion was highest in District Municipalities (95.3 percent).

### 9.8 Type of Clinics Identified as Providing Health or Family Planning Services

Public sector health facilities, especially public hospitals/medical colleges were the most widely known type of facilities as sources of health and family planning services (Table 9.9). In UFHP areas, 42 percent of respondents were able to identify a public sector facility as a source for health or family planning services in their respective areas, with 30 percent knowing of a public hospital/ medical college. Other public sector health facilities than hospitals/medical colleges were generally lesser known in the surveyed population. However, the next most widely known type of health facilities as sources of health or family planning services in the UFHP areas, after public sector facilities, were the UFHP clinics, known to 20 percent of respondents, with 19 percent identifying a UFHP static clinic and about two percent a UFHP satellite clinic. Only 13 percent of respondents in the UFHP areas were aware of the other NGOs' health facilities, and an equal proportion were aware of private medical facilities as sources of health or family planning services in their areas. Between the UFHP and non-UFHP areas, there were little variations in awareness of facilities as sources of health or family planning services, except that the other NGOs' facilities and private facilities were relatively more known in the non-UFHP areas, while the UFHP clinics were obviously less known there. Within the UFHP areas, UFHP clinics were most known in Thana Municipalities followed closely by City Corporations, while public sector facilities were known most in District Municipalities, least in City Corporations and at an intermediate level in Thana Municipalities.

Table 9.8	Awareness	of cli	inics	and I	hospitals

Percentage of women who know of a clinic or hospital in the area in which they live from which one can obtain health or family planning services, UFHP/non-UFHP areas

	Yes	No	Total	Number
City District Thana	86.5 95.3 91.1	13.5 4.7 8.9	100.0 100.0 100.0	2,505 2,444 465
Total UFHP	90.9	9.1	100.0	5,414
Total non-UFHP	92.3	7.7	100.0	1,780

Table 9.9 Type of clinic identified as providing health and family planning services

Distribution of identified facility types identified by women, by city type and UFHP/non-UFHP area

Type of clinic/hospital	City	District	Thana	UFHP	Non-UFHP
Public Sector Hospital/Medical College Family Welfare Center Thana Health Complex MCWC	24.6	59.5	47.2	42.3	40.2
	20.5	43.4	9.5	29.9	31.2
	0.0	1.2	12.4	1.6	1.0
	0.3	0.8	20.7	2.2	0.8
	2.7	14.1	3.9	8.0	6.0
Rural Dispensary/Community clinic	1.1	0.1	0.8	0.6	1.2
UFHP Static Clinic Satellite clinic	23.6	16.0	26.1	20.4	9.1
	20.2	15.5	25.2	18.5	10.1
	3.3	0.4	0.9	1.8	1.0
Other NGO	17.9	9.6	6.4	13.1	18.8
Hospital	3.4	2.1	3.2	2.8	3.4
Clinic	14.5	7.5	3.2	10.4	15.3
Private Medical Center Private Clinic/Doctor Traditional Doctor Pharmacy	16.3	9.2	8.9	12.5	17.2
	16.0	8.9	8.3	12.1	16.6
	0.0	0.1	0.2	0.0	0.1
	0.3	0.3	0.3	0.3	0.6
Other	3.0	0.8	2.1	1.9	4.5
Don't Know Type	14.3	4.7	9.1	9.5	8.0
Total	100.0	100.0	100.0	100.0	100.0
Number of Women	2,505	2,444	465	5,414	1,780

Note: Numerator is number of women identifying specific facility types; Denominator is all women.

## 9.9 Knowledge of ESP Services at Hospitals/Clinics

Table 9.10 shows the percentage of women knowing of specific services available at specific types of hospitals/clinics. Child health related services and maternal health related services – followed in order by family planning services and the services for treatment of general illness – were the most known services provided by UFHP clinics in UFHP areas. There were no marked variations in the (relative) awareness of the specific services between UFHP clinics, other NGOs' clinics, and Government hospitals/clinics. However, compared to the UFHP clinics, government hospitals/clinics were relatively more known for services for treatment of general illness and relatively less known for the family planning services. There were no important differentials associated with the awareness of services available at hospitals/clinics between UFHP and non-UFHP areas, or within the UFHP areas by the type of urban area.

## 9.10 Identification of ESP services at Static Clinics

Table 9.11 presents the percentage of respondents who could spontaneously name specific ESP services available at any type of hospital/clinic. In UFHP areas, among respondents knowing of hospitals/clinics as providing health and family planning services in their areas, 80 percent could spontaneously name the child health related services as available at those hospitals /clinics; 63 percent the maternal health related services; and only 43 percent the family planning services. Although the differentials in naming of ESP services by respondents' background characteristics were usually not very pronounced, it was apparent that women were more likely to remember the ESP services if they were educated or more educated, if they were currently married, or if they were in the age range of 25–39 years. There were virtually no variations in naming of ESP services between the UFHP and non-UFHP areas. There were also no discernible variations in the UFHP areas by type of urban centers.

Table 9.10 Knowledge of ESP Services at hospital/clinics

Percentage of women who identify specific services at different types of hospitals/clinics by city type and UFHP/non-UFHP area.

	City				District			Thana			UFHP Total				Non-UFHP					
Service	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI
Family Planning	45.9	59.2	47.3	31.4	46.3	57.9	57.3	22.7	51.0	64.9	50.5	12.1	46.6	59.4	50.7	27.3	41.4	66.5	48.8	23.5
Clinical Method	40.5	48.5	36.7	24.5	41.5	46.2	54.0	18.9	43.7	59.6	43.5	9.0	41.4	48.9	42.7	21.7	36.2	51.8	40.4	18.6
Non-clinical method Advice for Side	26.2	43.1	34.2	14.5	30.4	47.2	40.5	9.1	35.9	50.1	45.7	7.8	29.8	45.3	36.7	12.3	27.6	58.4	37.7	14.4
Effects	1.5	3.1	3.3	2.4	1.4	2.9	4.6	0.6	0.7	2.2	0.3	0.0	1.3	3.0	3.6	1.6	1.4	2.5	2.7	2.0
Maternal Health	61.9	75.7	76.0	66.6	69.3	78.7	75.2	55.9	57.0	69.9	61.8	51.2	66.2	76.1	75.1	62.1	67.6	68.5	68.9	64.7
ANC	47.1	53.4	54.8	53.7	48.8	59.9	50.6	37.5	35.6	50.9	36.9	39.3	47.1	55.4	52.7	47.4	52.7	59.9	54.5	52.9
PNC	36.4	21.2	25.4	36.5	36.9	20.9	34.4	35.6	21.9	10.1	29.3	25.6	35.3	19.9	28.5	35.5	34.7	13.7	26.9	40.2
TT	22.7	51.4	47.2	20.8	35.8	50.1	37.3	15.1	32.3	41.9	28.7	7.5	31.9	49.9	43.2	18.1	30.9	35.0	42.2	22.
Child Health	88.9	84.0	89.6	86.0	92.6	88.7	80.9	85.4	91.8	84.0	83.6	90.6	91.5	85.7	86.5	86.0	94.0	87.8	86.2	89.2
EPI	31.4	67.0	62.7	20.6	41.3	61.2	40.9	12.2	37.9	61.0	51.0	13.2	38.3	64.3	55.1	17.4	32.6	53.3	51.2	17.
Diarrhea Treatment/																				
ORS	8.8	3.8	3.0	6.1	15.6	4.0	5.0	4.9	15.2	2.8	5.0	3.3	13.7	3.7	3.7	5.5	13.0	4.1	6.9	3.
ARI Treatment	2.3	1.9	2.8	1.3	1.8	0.9	0.0	1.0	1.8	1.1	0.1	2.5	2.0	1.5	1.7	1.3	1.4	0.0	0.0	1.
Vitamin A	1.2	4.9	3.3	2.0	2.7	3.5	1.9	0.8	5.9	7.5	4.8	2.9	2.6	4.7	2.9	1.6	2.0	4.1	3.6	0
Illnesses (General)	73.4	44.3	51.1	72.1	75.5	49.3	53.0	75.6	74.5	47.1	55.0	85.6	74.8	46.4	51.9	74.1	79.4	54.3	53.6	80.4
Other Child Care	15.8	13.3	15.9	14.6	17.2	14.5	16.7	18.5	14.2	14.3	23.5	4.8	16.6	13.8	16.5	15.3	25.6	26.9	20.4	24.5
Treatment of RTI/STD	1.7	0.2	0.6	2.2	0.8	0.6	2.1	2.9	0.0	0.0	0.0	0.0	1.0	0.3	1.1	2.3	0.3	0.0	1.2	2.3
General Health	22.0	9.4	9.3	20.5	22.3	9.3	19.9	17.4	9.6	9.4	7.2	3.0	21.2	9.4	12.7	18.4	15.4	2.5	7.5	21.0
Other	4.8	1.4	2.0	1.9	5.9	0.2	2.1	7.6	4.1	0.2	0.0	20.5	5.4	0.8	2.0	4.9	9.0	3.0	5.7	12.
Does not Know	3.1	6.1	4.1	3.8	1.0	2.0	5.4	4.0	1.6	5.7	0.4	5.0	1.6	4.6	4.4	4.0	1.8	4.1	3.9	2.0
Number of Women	617	590	448	408	1,455	390	234	225	219	121	30	41	2,291	1,102	711	674	715	197	334	30

UFHP SC = UFHP Static Clinic; GOB SC = Gov't of Bangladesh Clinic; Oth NGO = Other NGO clinic; PRI= private clinic

Note: Numerator is the number of women identifying specific services; Denominator is the number of women identifying hospital/clinic offering health or family planning services in the area in which she lives.

Table 9.11 Knowledge of ESP Services

Percentage of women who can name ESP services by selected background characteristics

Background characteristic	Family Planning	Maternal Health	Child Health	Other Reproductive Health	Number
Age 15-19 20-24 25-29 30-39 40-49	35.3 43.2 45.9 49.7 41.4	57.9 64.3 69.5 65.5 60.2	73.6 80.8 82.2 83.9 81.0	0.0 0.6 1.5 1.0 1.0	647 982 998 932 1,786
Marital status Currently Married Separated Deserted Divorced Widowed	43.8 35.8 33.8 42.1 34.0	64.1 53.9 39.8 44.2 55.5	80.7 72.2 73.4 79.3 79.7	0.8 0.0 0.9 2.0 1.2	4,925 74 84 76 255
Education No education Primary Secondary Higher Secondary University/College	38.9 46.3 44.1 45.8 49.2	53.2 64.1 68.7 74.4 76.2	77.1 81.5 81.7 84.0 86.7	0.8 0.6 0.8 2.2 1.6	1,920 1,280 1,537 437 240
Number of Living Children 0 1 2 3 4+	30.6 43.2 45.4 47.0 44.2	55.8 63.4 67.2 64.4 60.3	70.2 80.3 82.8 83.5 81.0	1.2 0.5 0.9 1.7 0.6	661 1,211 1,412 906 1,225
Residence City District Thana	40.8 44.8 46.0	60.5 67.0 54.8	75.1 85.8 80.9	0.9 1.0 0.0	2,505 2,444 465
Total UFHP	43.0	62.9	80.4	0.9	5,414
Total non-UFHP	39.9	62.8	83.5	0.7	1,780

## 9.11 Use of Static Clinics/Hospitals

Table 9.12 shows the percentage of respondents who have ever used a hospital/clinic for a service(s) or used a hospital/clinic in the three months preceding the survey. Close to 60 percent of respondents who identified a hospital/clinic reported having ever used a hospital/clinic in the UFHP areas. Ten percent had used a UFHP static clinic in UFHP areas as whole; many more (15 percent) had used a UFHP static clinic in Thana Municipalities. In UFHP areas, 17 percent of respondents who were familiar with hospitals/clinics in their areas reported having visited a hospital/clinic in the three months preceding the survey— with 7 percent for a public facility, 4 percent for an UFHP facility and even fewer for other types of facility. Although the overall proportion using a hospital/clinic varied slightly between the UFHP and non-UFHP areas, or within the UFHP areas by type of urban centers, UFHP clinics were found to be relatively more used in thana towns and City Corporations than in district towns.

# 9.12 Use of ESP Services at Hospital/Clinics

The services most commonly ever used at UFHP static clinics in UFHP areas were related to child health (32 percent), more than half for EPI services and a slightly smaller proportion for general childhood illnesses (Table 9.13). The next most commonly ever used services at UFHP static clinics were for maternal health services (19 percent) such as ANC (9.8 percent) and TT vaccinations (10.7 percent). Family planning services were also commonly used (16 percent), mostly for clinical methods (9 percent).

For services used in the last 3 months (Table 9.14), again the most commonly used services were related to child health (10 percent of users), evenly divided between EPI (4.6 percent) and treatment of general childhood illnesses (4.1 percent). However, family planning services – not maternal health services – were the next most commonly used services in the past 3 months, by 7 percent of users. Treatment of RTI/STDs was almost never mentioned, either as services being ever used or used in the past 3 months.

Table 9.12 Usage of Hospital/Clinics

Percentage of women who have ever used hospital/clinic and used clinic in the past 3 months by city type and UFHP/non-UFHP area

		Ever U	Jsed Hospital	/Clinic		Used Hospital/Clinic in Past 3 Months					
Type of Hospital/Clinic	City	District	Thana	Total UFHP	Non- UFHP	City	District	Thana	Total UFHP	Non- UFHP	
Public Sector Hospital/Medical College Family Welfare Center Thana Health Complex MCWC Rural Dispensary/Community clinic UFHP Static clinic Satellite clinic	16.2 13.4 0.0 0.2 1.9 0.8 12.5 10.8 1.7	44.3 31.3 0.9 0.4 11.6 0.1 8.6 8.3 0.3	30.0 6.2 7.5 13.1 2.5 0.8 15.8 15.0 0.8	30.1 20.9 1.1 1.4 6.3 0.4 11.0 10.0	29.1 22.5 0.8 0.4 4.5 0.9 5.7 4.8 0.8	3.9 3.2 0.0 0.1 0.3 0.3 4.8 3.8 1.0	11.0 7.3 0.3 0.1 3.3 0.0 3.0 2.9 0.1	7.3 2.0 1.4 3.3 0.5 0.2 5.0 4.5 0.5	7.4 4.9 0.3 0.4 1.7 0.1 4.0 3.5 0.5	5.8 4.2 0.3 0.2 0.8 0.4 0.4 1.4 0.2	
Other NGO Hospital Clinic	13.1 2.3 10.8	6.8 1.8 5.0	4.8 2.4 2.4	9.5 2.1 7.5	12.2 2.0 10.2	4.0 0.4 3.6	1.9 0.2 1.8	1.0 0.7 0.3	2.8 0.3 2.5	3.5 0.3 3.2	
Private Medical Center Private Clinic/Doctor Traditional Doctor Pharmacy	10.2 10.0 0.0 0.1	5.5 5.3 0.0 0.2	5.8 5.2 0.2 0.3	7.7 7.5 0.0 0.2	11.0 10.4 0.1 0.5	2.7 2.6 0.0 0.1	1.2 1.1 0.0 0.1	0.6 0.5 0.1 0.0	1.8 1.7 0.0 0.1	2.9 2.8 0.0 0.1	
Other	2.1	0.6	1.2	1.3	3.2	0.5	0.4	0.6	0.4	1.1	
Don't Know Type	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	
Missing	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.1	
Total	54.2	66.0	57.7	59.8	61.5	16.0	17.5	14.5	16.6	14.8	
Number of Women	2,505	2,444	465	5,414	1,780	2,505	2,444	465	5,414	1,780	

Note: Numerator is the number of women who have ever used or used in the past 3 months a hospital/clinic offering health or family planning services; Denominator is all women

Table 9.13 ESP Services Ever Used at hospital/clinics

Percentage of women identifying a hospital/clinic who has ever used specific services at hospitals/clinics, by city type and UFHP/non-UFHP area.

		Ci	ty			Dis	trict			Th	ana			UFHP	Total			Non-l	JFHP	
Service	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI
Family Planning	12.0	14.4	14.2	6.0	11.6	15.9	23.0	7.5	12.7	21.6	11.9	1.5	11.8	15.7	17.0	6.2	12.3	16.2	16.2	3.3
Clinical Method	9.9	9.9	9.2	4.2	8.8	13.0	18.4	6.2	9.4	14.0	9.8	1.5	9.1	9.4	12.3	7.4	9.4	11.7	14.1	1.0
Non-clinical method Advice for Side	2.5	3.4	5.3	1.5	2.6	2.6	4.6	1.2	4.6	6.9	4.1	0.0	2.7	3.5	5.0	1.3	3.1	6.1	3.9	1.6
Effects	0.9	2.7	1.4	1.2	0.9	1.9	2.8	0.0	0.4	2.8	0.1	0.0	0.9	2.4	1.8	0.7	0.7	2.0	1.2	0.7
Maternal Health	20.6	17.6	30.2	20.9	25.2	20.1	22.6	16.6	14.4	25.3	31.3	18.4	22.9	19.4	27.7	19.3	22.9	17.8	26.0	20.9
ANC	13.9	10.5	17.7	16.9	14.6	12.3	13.4	11.1	7.1	16.5	16.8	12.9	13.7	9.8	16.2	14.7	13.4	11.2	15.6	16.7
PNC	7.6	1.1	5.8	8.2	9.6	2.2	6.6	4.5	2.8	2.7	5.6	4.9	8.4	1.7	6.1	6.8	8.7	2.5	5.1	8.5
TT	8.5	10.2	20.0	5.4	11.8	10.9	11.6	1.5	8.6	12.2	17.8	2.1	10.6	10.7	17.2	3.9	12.7	10.7	17.4	8.5
Child Health	43.0	33.8	50.0	39.0	48.7	29.6	37.1	35.3	43.5	32.6	42.8	34.9	46.7	32.2	45.5	37.5	51.3	32.0	42.5	40.8
EPI	10.1	19.8	28.1	4.4	12.9	12.4	12.2	3.1	9.3	17.8	12.2	5.0	12.0	17.0	22.2	4.0	12.3	17.3	22.8	4.2
Diarrhea Treatment/																				
ORS	1.5	1.1	1.4	1.9	2.7	0.3	1.1	2.9	3.1	0.4	2.2	0.0	2.4	0.7	1.3	2.1	1.7	0.5	1.8	0.7
ARI Treatment	1.0	0.6	0.5	0.9	0.7	0.2	0.0	0.9	1.0	0.0	0.0	1.7	0.8	0.4	0.3	1.0	0.7	0.5	0.9	1.3
Vitamin A	0.7	0.2	1.9	0.9	0.3	0.0	0.5	0.0	1.5	0.6	0.3	0.0	0.5	0.2	1.4	0.6	0.0	0.0	0.6	0.0
Illnesses (General)	30.3	14.3	23.3	30.8	33.0	15.6	21.0	26.1	28.4	14.0	31.1	31.8	31.8	14.7	22.8	29.3	36.8	16.8	17.7	31.7
Other Child Care	5.6	2.4	5.4	5.6	6.7	5.3	6.5	5.5	5.9	2.7	9.7	0.2	6.3	3.5	6.0	5.2	9.1	2.5	4.5	9.2
Treatment of RTI/STD	0.7	0.2	0.0	1.2	0.7	0.7	1.1	2.1	0.4	0.1	0.6	0.0	0.7	0.4	0.4	1.4	0.1	0.5	0.6	2.0
General Health	9.5	3.8	5.5	5.2	7.0	4.0	7.0	5.8	3.4	2.1	7.1	1.1	7.3	3.7	6.1	5.1	4.2	1.0	0.6	8.5
Other	2.6	0.9	2.5	2.1	3.2	0.6	4.0	1.8	2.5	1.3	2.6	17.0	3.0	0.8	3.0	2.9	4.8	2.5	2.7	2.9
Does not Know/Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Number	617	590	448	408	1,455	390	234	225	219	121	30	41	2,291	1,102	711	674	715	197	334	306

UFHP SC = UFHP Static Clinic; GOB SC = Gov't of Bangladesh Clinic; Oth NGO = Other NGO clinic; PRI= private clinic

Note: Numerator is the number of women who have ever used specific services at a hospital/clinic offering health or family planning services; Denominator is all women identifying a hospital/clinic

Table 9.14 ESP Services Used in past 3 months at hospital/clinics

Percentage of women identifying a hospital/clinic who have used specific services in past 3 months at hospitals/clinics, by city type and UFHP/non-UFHP area.

rescentage of women ide	Jitii y iii g		ity	who he	ive used	•	trict	nii pust	3 mond		ana	inies, oy	city typ	UFHE		or o	urcu.	Non-	UFHP	
Services Used	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI	GOB	UFHP	Other NGO	PRI
Family Planning	1.6	6.3	5.4	2.3	3.0	8.1	7.1	0.8	2.4	6.9	0.1	0.0	2.6	7.0	5.7	1.7	2.0	4.1	4.5	1.0
Clinical Method	0.9	4.9	3.4	1.2	2.4	6.5	5.5	0.8	1.5	5.6	0.1	0.0	1.9	5.5	4.0	1.0	0.7	3.0	3.9	0.0
Non-clinical method	0.7	0.6	1.2	0.3	0.4	0.8	1.6	0.0	0.9	0.1	0.1	0.0	0.6	0.6	1.2	0.2	1.1	0.0	0.3	0.7
Advice for Side	0.7	0.0	1.2	0.5	0.4	0.0	1.0	0.0	0.7	0.1	0.1	0.0	0.0	0.0	1.2	0.2	1.1	0.0	0.5	0.7
Effects of Treatment	0.0	1.0	0.8	0.9	0.1	1.0	0.0	0.0	0.0	1.1	0.0	0.0	0.1	1.0	0.5	0.5	0.1	1.5	0.3	0.3
Effects of Treatment	0.0	1.0	0.8	0.9	0.1	1.0	0.0	0.0	0.0	1.1	0.0	0.0	0.1	1.0	0.5	0.5	0.1	1.5	0.5	0.5
Maternal Health	2.6	4.3	3.9	2.8	2.3	2.9	2.0	2.0	1.8	3.3	6.2	0.0	2.4	3.7	3.4	2.3	1.8	1.0	4.8	2.6
ANC	1.7	3.5	2.5	2.1	1.2	2.4	1.1	1.3	0.7	1.4	2.7	0.0	1.3	2.9	2.1	1.7	1.0	1.0	3.0	1.6
PNC	0.5	0.2	0.3	0.0	0.5	0.0	0.0	0.0	0.7	0.5	4.7	0.0	0.5	0.2	0.4	0.0	0.4	0.0	0.6	0.7
TT	1.7	1.3	1.9	0.7	1.3	1.2	0.0	0.6	0.9	2.8	3.3	0.0	1.4	1.4	1.6	0.6	0.7	0.0	2.1	0.7
11	1./	1.3	1.9	0.7	1.3	1.2	0.9	0.0	0.9	2.0	3.3	0.0	1.4	1.4	1.0	0.0	0.7	0.0	2.1	0.5
Child Health	9.8	11.1	13.3	9.1	11.0	7.6	8.2	8.1	10.3	9.7	8.7	7.2	10.6	9.7	11.4	8.7	10.1	7.6	9.9	11.1
EPI	0.4	5.8	5.3	0.3	1.6	3.0	1.9	0.6	2.0	4.0	1.2	1.0	1.3	4.6	4.0	0.5	0.7	3.6	3.3	1.0
Diarrhea Treatment/																				
ORS	0.2	0.4	0.6	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4	0.2	0.4	0.0	0.6	0.0	0.3	0.7
ARI Treatment	0.2	0.2	0.0	0.3	0.2	0.0	0.0	0.5	0.2	0.0	0.0	0.8	0.2	0.1	0.0	0.4	0.0	0.0	0.0	0.7
Vitamin A	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Illnesses (General)	6.6	4.5	5.9	7.5	7.9	3.1	3.7	7.3	6.5	5.7	6.8	5.3	7.4	4.1	5.2	7.3	7.1	3.6	5.4	6.9
Other Child Care	2.1	1.1	2.9	1.6	2.1	1.5	2.6	0.3	1.7	0.7	0.8	0.0	2.0	1.2	2.7	1.0	2.2	1.0	0.9	2.9
			,	1.0		1.0		0.0	1.,	0.,	0.0	0.0				1.0		1.0	0.7	,
Treatment of RTI/STD	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.3	0.3
General Health	2.2	0.5	2.1	1.8	1.9	0.3	3.4	1.1	0.6	0.7	0.0	0.0	1.8	0.4	2.4	1.5	0.7	1.0	0.0	2.0
Other	0.4	0.5	0.5	0.9	0.6	1.0	0.0	0.0	0.3	0.1	0.0	0.0	0.5	0.6	0.3	0.6	0.4	0.5	0.3	0.3
Does not Know/Missing	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.0	0.3	0.0
Number	617	590	440	408	1 455	390	224	225	210	101	30	41	2 201	1 102	711	711	674	715	197	334
TAUTHOCI	617	390	448	408	1,455	390	234	225	219	121	30	41	2,291	1,102	711	711	674	715	19/	334

UFHP SC = UFHP Static Clinic; GOB SC = Gov't of Bangladesh Clinic; Oth NGO = Other NGO clinic; PRI= private clinic

Note: Numerator is the number of women who have used specific services in the past 3 months at a hospital/clinic offering health or family planning services; Denominator is all women identifying a hospital/clinic.

## 9.13 Assessments of Quality of Care at Hospitals/Clinics

As with satellite clinics, women who used hospitals/clinics in the past 3 months were asked a series of questions about the quality of care they received at the hospital/clinic. This included information on the amount paid and length of waiting time, if any, perceptions of the reasonableness of the amount paid and length of wait, quality of care, and overall satisfaction. Table 9.15A presents this information for UFHP and non-UFHP areas, and Table 9.15B presents this information for the 3 city types in UFHP areas. Assessments are categorized by the ownership of the hospital/clinic: public, UFHP, other NGO and private.

In UFHP areas, the amount paid for services at UFHP clinics was 34.3 taka on average (Figure 9.2). The amount paid was highest on average at private medical facilities – 433 taka. The mean amount paid at government hospital/clinics was also considerably higher than at UFHP clinics – 193 taka on average – though a higher proportion of users of government hospitals/clinics relative to UFHP clinic users did not pay anything (42 percent versus 17 percent). The higher average expenditures at government hospitals/clinics is likely the result of aggregating many different types of facilities, including hospitals and Thana Health Complexes, where more expensive secondary and tertiary type services were likely used than at UFHP clinics. On average, expenditures were 99 taka at other NGO facilities, though these too may reflect hospital services.

While most users of UFHP static clinics felt that the amount of their expenditures was "reasonable," over one-quarter felt that the amount was "high." This compares with a lower 22 percent of users of private clinics – where an identical proportion were exempt from paying - who felt that their expenditures were "high." A much smaller proportion of users of NGO clinics, 8 percent, did not pay, and a somewhat higher proportion, 29 percent, felt that the amount paid was "high."

Of the four types of hospitals/clinics, the mean waiting time at UFHP clinics was the shortest – 29.8 minutes – a full 10 minutes shorter than the alternatives. Mean waiting times in UFHP areas were 38 minutes at government hospitals/clinics, 39 minutes at other NGO clinics, and 40 minutes at private clinics. Nearly a third of users of UFHP clinics experienced no wait. Even so, one-quarter of users of UFHP clinics said that the length of the wait was "high." A smaller percentage, 21.5 percent, of private clinic users felt that their wait was long, but higher percentages of users of government hospitals/clinics (37.2 percent) and NGO hospitals/clinics (33.5 percent) felt that their wait was long.

Unlike ratings of quality at satellite clinics, ratings of quality at the different types of hospitals/clinics varied considerably. Over 13 percent of users of government hospitals/clinics in UFHP areas felt that staff behavior was "bad." Only 0.8 percent of users of UFHP clinics felt this way, lower than the rates at other NGO hospitals/clinics (3.7 percent) and private clinics (4.8 percent). At UFHP clinics, over 80 percent of users felt that staff behavior was "good," and an additional 19 percent felt that staff behavior was "very good." Over 98 percent of UFHP clinic users rated the quality of services as "good" or "very good," higher than users at government hospitals/clinics (91 percent) and other NGO hospitals/clinics (96 percent) and almost as high as users of priutf inics (1()-5.7(per)8.5(c)-0.7cent.()-5.7 Agherpr(o)4.1por(t)4.7(i)-1(o)4.1(n)-1.7O

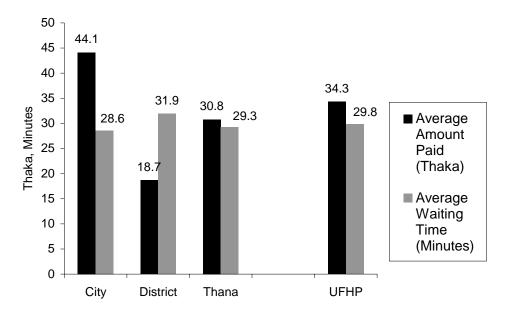
City Corporations and 21 percent in district municipalities. However, the proportion feeling this way was generally lower at UFHP clinics than at other types of hospitals and clinics.

For UFHP clinics in all city types, ratings of quality were uniformly good. More than 97 percent of users rated staff behavior at UFHP clinics as "good" or "very good" in all three city types. Only in district municipalities did a measurable fraction, 2.3 percent, feel that staff behavior was bad. Ironically, UFHP clinics in district municipalities also had the highest proportion of users, 27 percent, who felt that staff behavior was "very good." Over 95 percent of users of UFHP static clinics in all city types rated the quality of services and cleanliness as "good" or "very good." Nearly all users would recommend UFHP static clinics to friends or relatives.

Government hospitals/clinics also varied considerably in terms of price and quality. Mean expenditures were highest in City Corporations (307 taka) and lowest in Thana Municipalities (97 taka). Waiting times varied from 35 minutes in district municipalities to 49 minutes in Thana Municipalities. In all cases, waiting times at government hospitals/clinics exceeded those at UFHP static clinics. Government hospitals/clinics did not fare as well in terms of ratings of quality. A much higher proportion of users of government facilities than UFHP clinics rated waiting times as long in all three city types. The proportion of users rating staff behavior as "bad" was highest in City Corporations (19 percent) and lowest in Thana Municipalities (8.9 percent), many times higher than the average UFHP static clinic. Lower proportions of users of government facilities would recommend them to friends or relatives.

Other NGO facilities and private clinics were more expensive than UFHP static clinics in all city types. Expenditures at private clinics ranged from 111 taka on average in Thana Municipalities to 565 taka in City Corporations. Expenditures at NGO facilities ranged from 52 taka in district municipalities to 373 taka in Thana Municipalities. Small numbers of users of these types of facilities, however, likely provided wide variations. Average waiting times were longer than at UFHP static clinics in all cases except for private clinics in Thana Municipalities (which were used by only a handful of respondents). Quality of care was comparable to UFHP static clinics, though slightly higher proportions of users rated staff behavior as "bad" at both NGO and private clinics than at UFHP static clinics. Similar proportions of users of NGO and private clinics would recommend them to friends or relatives as users of UFHP static clinics.

Figure 9.2 Mean Expenditure (Taka) and Mean Waiting Times (Minutes) Among Users of UFHP Static Clinics



Quality Indicators		Ultill	P Areas		hs for UFHP and non-UFHP areas  Non-UFHP Areas					
Quanty marcators	GOB	UFHP	Other NGO	Private	GOB	UFHP	Other NGO	Private		
Average Amount Paid	192.5	34.3	98.7	432.6	207.3	27.4	314.1	196.1		
Cost of Treatment										
Free	41.9	17.2	8.4	17.3	32.7	12.0	11.3	39.6		
Low	10.7	9.1	18.1	12.2	8.7	4.0	11.3	10.2		
Reasonable	30.7	46.5	44.5	48.2	43.3	36.0	56.5	33.8		
High	16.0	26.9	29.0	22.3	15.4	48.0	19.4	15.8		
Missing	0.8	0.4	0.0	0.0	0.0	0.0	1.6	0.6		
Mean Waiting time at Clinic (minutes)	38.1	29.8	39.0	40.4	55.6	25.3	30.4	26.2		
Assessment of Length of wait										
No wait	26.9	31.5	14.5	34.2	26.0	36.0	32.3	33.3		
Low	6.1	4.6	9.8	1.0	7.7	0.0	8.1	5.9		
Reasonable	29.5	38.1	42.2	43.2	35.6	36.0	41.9	35.3		
High	37.2	25.4	33.5	21.5	29.8	28.0	16.1	25.5		
Missing	0.3	0.4	0.0	0.0	1.0	0.0	1.6	0.0		
Missing	0.3	0.4	0.0	0.0	1.0	0.0	1.0	0.0		
Staff Behavior										
Bad	13.4	0.8	3.7	4.8	8.7	0.0	4.8	3.9		
Good	78.9	80.6	83.6	76.7	79.8	68.0	75.8	68.6		
Very Good	7.3	18.6	12.7	18.4	11.5	32.0	17.7	27.5		
Missing	0.3	0.0	12.7	10.4	0.0	0.0	1.6	0.0		
	0.5	0.0			0.0	0.0	1.0	0.0		
Quality of Services										
Bad	8.8	1.1	3.7	0.8	8.7	0.0	6.5	3.9		
Good	83.7	85.1	80.6	90.1	80.8	68.0	79.0	74.5		
Very Good	7.1	13.8	15.8	19.1	10.6	32.0	12.9	21.6		
Missing	0.3	0.0	0.0	0.0	0.0	0.0	1.6	0.0		
Cleanliness of Clinic										
Bad	6.2	0.7	2.6	1.4	7.7	0.0	1.6	3.9		
Good	85.5	79.5	82.4	77.2	80.8	76.0	75.8	80.4		
Very Good	8.0	19.9	14.9	21.4	11.5	24.0	21.0	15.7		
Missing	0.3	0.0	0.0	0.0	0.0	0.0	1.6	0.0		
Mussing	0.5	0.0	0.0	0.0	0.0	0.0	1.0	0.0		
Recommend Clinic to Others										
Yes	93.7	98.0	96.3	96.9	95.2	100.0	88.7	96.1		
No	5.9	2.0	3.7	3.1	4.8	0.0	9.7	3.9		
Missing	0.3	0.0	0.0	0.0	0.0	0.0	1.6	0.0		
Number	401	216	152	98	104	25	62	51		

Women's perceptions of quality		C	ity			Dis	strict	,	Thana			
Quality Indicators	GOB	UFHP	Other NGO	Private	GOB	UFHP	Other NGO	Private	GOB	UFHP	Other NGO	Private
Average Amount Paid	307.3	44.1	108.9	565.1	162.8	18.7	52.3	147.0	96.7	30.8	372.9	111.7
Cost of Treatment												
Free	23.0	9.9	7.9	17.7	45.3	28.2	7.3	16.8	68.8	20.3	30.4	14.4
Low	15.5	9.3	17.1	11.1	9.8	8.0	20.7	12.8	3.6	11.2	14.2	29.3
Reasonable	41.0			47.5	29.0	51.3	47.7	53.0			24.2	18.0
		44.3	43.9						14.6	43.1	24.7	
High	19.1	36.5	31.1	23.8	15.2	11.4	24.3	17.4	13.0	25.3	30.8	38.3
Missing	1.4	0.0	0.0	0.0	0.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Mean Waiting time at Clinic (minutes)	42.5	28.6	84.7	39.3	35.1	31.9	45.3	46.0	49.5	29.3	70.1	12.7
Assessment of Length of wait												
No wait	28.1	30.7	15.2	39.0	26.0	34.0	11.6	23.4	30.0	27.5	28.8	29.3
	20.1	50.7	13.2					23.4	30.0	27.3		29
Low	4.3	5.3	12.3	0.0	6.4	2.5	5.4	1.5	9.2	7.7	0.0	19.
Reasonable	29.7	36.9	40.4	44.3	29.7	41.5	49.6	41.4	27.6	33.5	4.8	37.
High	36.6	27.1	32.1	16.7	37.9	20.8	33.4	33.6	33.2	31.3	66.4	14.
Missing	1.4	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Staff Behavior												
Bad	19.4	0.0	2.5	5.8	11.8	2.3	6.5	0.0	8.9	0.0	0.0	29.3
												29
Good	65.7	84.6	82.1	75.8	82.6	71.1	85.9	82.3	87.4	89.1	94.7	45.
Very Good	13.5	15.4	15.3	18.4	5.5	26.5	7.6	17.7	3.7	10.9	5.3	25.
Missing	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Quality of Services												
Bad	9.6	1.0	2.5	0.0	8.5	1.7	6.5	2.9	8.3	0.0	0.0	0.
					0.5							
Good	75.4	86.9	78.7	79.4	86.1	80.4	83.3	82.2	88.9	90.3	94.7	74.
Very Good	13.6	12.0	18.8	20.6	5.3	17.9	10.2	14.9	2.8	9.7	5.3	25.
Missing	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Cleanliness of Clinic												
Bad	3.9	0.0	2.4	0.0	6.9	1.9	3.3	4.7	6.8	0.2	0.0	0.
			81.3									
Good	81.4	85.6		73.9	86.5	67.8	85.7	84.7	89.2	84.0	72.8	80.
Very Good	13.3	14.4	16.3	26.1	6.6	30.3	10.9	10.6	4.0	15.8	27.2	19.
Missing	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Recommend Clinic to Others												
Yes	90.4	96.9	96.0	98.2	99.1	99.1	96.7	93.6	92.4	100.0	100.0	100.
No	8.2	3.1	4.0	1.8	0.9	0.9	3.3	6.4	7.6	0.0	0.0	0.
Missing	1.4	0.0.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Number	98	120	101	67	270	73	47	28	34	23	4	

# **APPENDIX A: TABLES**

## A1. Number of antenatal care visits and timing of first visit

Percent distribution of women who had <u>a live birth in the last 35 months</u> preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit, by division and UFHP/non-UFHP areas

Number and timing of ANC visits	City	District	Thana	Total UFHP	Non - UFHP
Number of ANC wisits					
Number of ANC visits None	24.1	26.9	40.3	26.9	27.2
1	8.9	11.2	13.3	10.3	9.3
2-3	24.4	28.1	21.6	25.7	26.4
4+	42.4	33.8	24.7	37.1	37.1
Don't know/missing	0.2	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0
Median number of visits					
(for those with ANC)	3.5	2.8	2.5	3.1	3.1
Number of months pregnant at time of first ANC visit					
No antenatal care	24.1	26.9	40.3	26.9	27.2
<4	40.1	33.7	22.5	35.6	33.8
4-5	22.8	22.8	20.8	22.6	26.2
6-7	10.9	12.0	10.6	11.3	10.5
8+	2.1	4.3	5.7	3.4	2.3
Don't know/missing	0.0	0.3	0.1	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0
Median months pregnant					
at first visit (for those with ANC)	3.9	4.4	5.01	4.1	4.3
Number	760	681	154	1,595	526

A2. Source of Antenatal Care
Percentage of women with <u>a live birth in the last 35 months preceding the survey</u> by whether they had at least one antenatal care (ANC) visit during the last pregnancy by source of care, UFHP and non-UFHP areas

	City	District	Thana	UFHP	Non-UFHP
Percentage received ANC	75.9	73.1	59.7	73.1	72.8
Women with a birth in last year					
preceding the survey	760	681	154	1,595	526
Place of ANC checkup					
HOME					
Medical person at home	0.5	1.9	2.0	1.2	1.0
Non-medical person at home	0.4	0.3	0.2	0.4	0.0
PUBLIC SECTOR					
Hospital/medical college	11.1	12.1	3.1	10.9	12.8
Family Welfare Centre	0.7	1.3	8.4	1.6	1.8
Thana Health Ccomplex	1.4	1.7	8.3	2.0	1.6
MCWC	3.3	23.7	4.0	12.1	11.0
Rural dispensary/Community clinic	0.7	0.0	1.0	0.4	0.5
Satellite clinic/ EPI outreach site	0.4	0.8	0.7	0.6	1.0
FWA	0.7	0.2	0.0	0.4	0.3
NIPHP NGO					
Static clinic	9.1	9.5	20.4	10.1	3.9
Satellite clinic	13.0	3.5	5.2	8.3	6.3
OTHER NGO					
Hospital	2.6	2.4	4.4	2.7	2.3
Clinic	15.5	3.7	3.8	9.5	14.4
Satellite clinic	1.1	1.5	2.9	1.4	1.3
Fieldworker	0.0	0.0	0.0	0.0	0.3
PRIVATE MEDICAL SECTOR					
Private clinic/doctor	31.6	32.8	28.8	31.9	35.0
Traditional doctor	0.7	0.5	1.7	0.7	0.5
Pharmacy	1.2	1.6	1.0	1.3	0.0
OTHER	5.4	1.8	3.7	3.8	5.0
Don't Know	0.0	0.4	0.0	0.2	0.0
Missing	0.6	0.2	0.4	0.4	1.0
Total	100.0	100.0	100.0	100.0	100.0
Number	577	498	92	1,166	383

# APPENDIX B: MITRA AND ASSOCIATES PERSONNEL WHO IMPLEMENTED THE 2001 UFHP SURVEY

## **PROJECT KEY PERSONNEL**

## PROJECT DIRECTOR

Mr. S. N. Mitra

#### DEPUTY PROJECT DIRECTOR

Mr. Shahidul Islam (Research)

Mr. S. Fuad Pasha (Administration)

#### PROJECT MANAGERS

Mr. A. B. Siddique Mozumder

Mr. Jahangir Hossain Sharif

Mr. N. C. Barman

#### FIELD STAFF FOR HOUSEHOLD LISTING/MAPPING AND COMMUNITY/HEALTH FACILITY SURVEY

#### **QUALITY CONTROL OFFICERS**

Mr. Masud Karim Reza

Mr. Sanjoy Bhowmik

Mr. Golam Rabbani

Mr. Abu Md. Hossain

## SUPERVISORS

Mr. Abdul Kadir Khan

Mr. Abu Sayed

Mr. Mozaffar Hossain Mr. Abdul Aziz

Mr. Jubair Ebne Jahan

Mr. Md. Salim

Mr. Biplab Bandhu Roy

## LISTERS/INVESTIGATORS

Mr. Mokbul Hossain Sharif

Mr. Nasir Ahmed

Mr. Prodip Biswas

Mr. Helal Uddin Bhuiyan

Mr. Habibur Rahman

Mr. Golam Azam

Mr. Wahiduzzaman

Mr. SK. Nasiruzzaman

Mr. Majedul Hoque

Mr. Mojibur Rahman

Mr. Salam Khan

Mr. Zatin Ch. Sarker

Mr. Mosharaf Hossain

Mr. Munirul Islam

Mr. Julhash Sikder

Mr. Monjurul Hoque(Monju)

Mr. Golam Rabbani Sarker

Mr. Md. Arifuzzaman

Mr. Billal Hossain

Mr. Rezwanul Hoque

Mr. Sazzad Hossain Khan

Mr. G.M. Nazmul Hossain

Mr. Afzal Hossain

Mr. Rezaul Karim

Mr. Abu Bellal

Mr. Nazmul Hoque

Mr. Kho. Mahfuzul Alam

Mr. Shamsuzzaman

Mr. Faruk Ahmed Khan

Mr. Nurul Islam

Mr. Nurul Islam Khondoker

Mr. Abul Kalam Azad

#### **QUALITY CONTROL OFFICERS**

- Ms. Sayera Banu
- Mr. Najim Uddin
- Ms. Dulena Begum
- Ms. Jesmin Akter

## MALE SUPERVISORS

- Mr. Badar Alam
- Mr. Dilip Kumar Halder
- Mr. Delowar Hossain
- Mr. Tosharaf Hossain Popy
- Mr. Golam Ahmed Siddique
- Mr. Abdus Salam Mia
- Mr. Abdullah Bhuiyan
- Mr. Mamunur Rahman Khan
- Mr. Abdur Rashid

#### FEMALE FIELD EDITORS/SUPERVISORS

- Ms. Touhida Sultana
- Ms. Minara Mahbub
- Ms. Pervin Akter
- Ms. Yeasmin Begum
- Ms. Asma Khanam
- Ms. Khadiza Akter
- Ms. Sanjida Akter
- Ms. Kohinoor Akter
- Ms. Aparna Rani Mondal
- Ms. Karar Shanaj Pervin

#### FEMALE INTERVIEWERS

- Ms. Ruma Pervin
- Ms. Taslima Begum
- Ms. Sabina Akter
- Ms. Ayesha Begum
- Ms. Rozina Khatun
- Ms. Meherun Nahar Shikha
- Ms. Doli Nandi
- Ms. Khadizatul Kobra
- Ms. Sayema Akter
- Ms. Salma Pervin Joly
- Ms. Rita Hira
- Ms. Morzina Begum
- Ms. Lovely Yeasmin
- Ms. Monju Halder
- Ms. Tahmina Akter (Soma)
- Ms. Sharmina Pervin
- Ms. Banani Saha Ms. Tahera Khatun
- Ms. Lutfun Nahar
- Ms. Shilpe Shome
- Ms. Farzana Azad
- Ms. Latifa Khatun
- Ms. Rebeka Sultana
- Ms. Badrunnessa
- Ms. Sadia Afroz
- Ms. Shahida Akter Nargis
- Ms. Liza Sultana
- Ms. Masuma Begum

## **DATA PROCESSING STAFF**

Mr. Alamgir : Programmer
Mr. Shshir Paul : Editor
Mr. Haradhan Kumar Sen : Supervisor

Mr. Suyeb Hossain : Data Entry Operator Mr. Sujan Kumar Sen : Data Entry Operator Mr. Jhumma Rani Datta : Data Entry Operator

# ADMINATRATIVE STAFF

Mr. Bimal Ch. Datta, Accounts Officer Mr. Jaynal Abdin, Secretary

# APPENDIX C: QUESTIONNAIRES